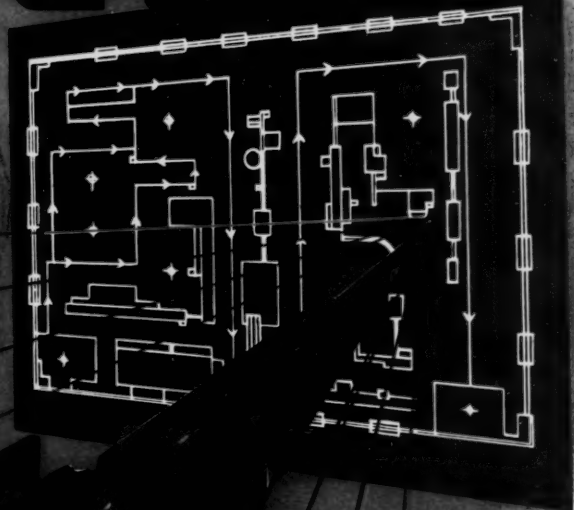
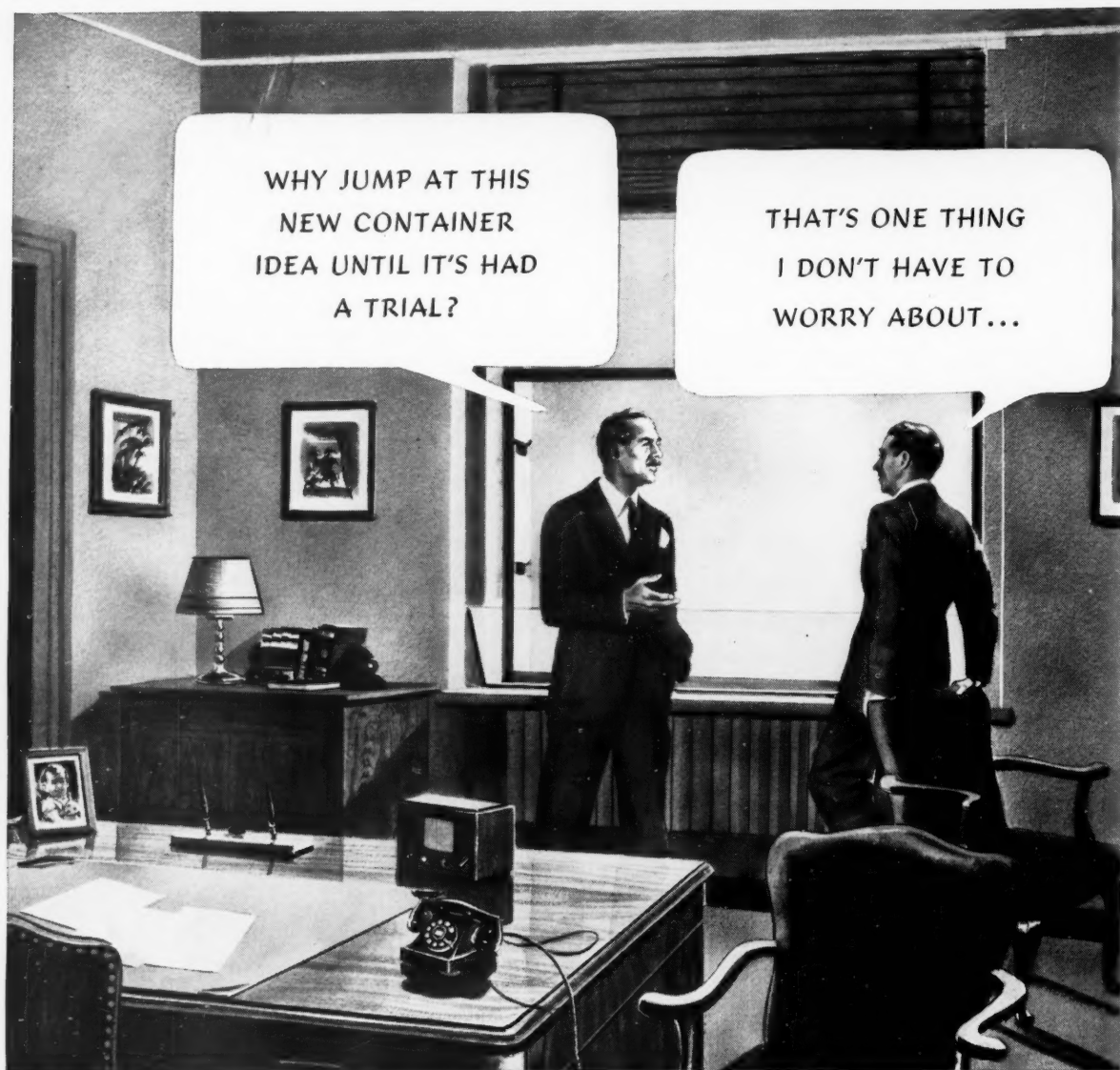


MODERN PACKAGING



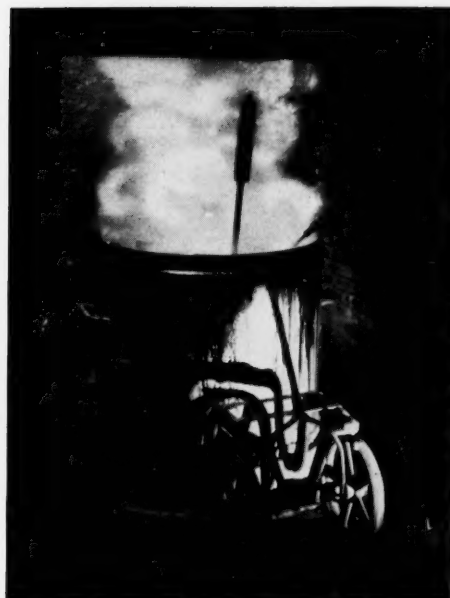
JUNE 1940



“**Y**ou see, this container has been through the mill. It’s been tested by three sound, hard-thinking divisions of American Can Company . . . their engineering staff, their research staff, and their marketing staff. We *know* this container is all right, because it’s been tailor-made to fit our problem. So forget your worries. Think of the competitive advantages we’re getting out of a new and tested packaging idea.”



AMERICAN CAN COMPANY, 230 PARK AVENUE, NEW YORK, N. Y.



EVERY DAY Mrs. Homemaker goes shopping to provide products for the great American table. Displayed for her selection on the shelves of food shops are row on row of glass packaged goods, the variety of which would amaze famed gourmets of distant ages. Mrs. Homemaker selects, not unlikely, products packaged with distinct attractiveness. Atop many of her choices are metal caps decorated with rich gold lacquer. So even and so unmarred is this golden sheen, that it gives little hint of the rigors of the packing operation to which it has been subjected. It has faced the steel fingers of the capping machine, the blistering heat of retort and sterilizer, the acid and moisture of the product itself. Yet it has come through with flying color . . . shining, sparkling, golden color. For the past thirty-one years the lacquer used on Phoenix Metal Caps has been manufactured within our Chicago plant. In 1909, we dispatched a plant executive to Europe to obtain the formula for the lacquer which we then imported and which was judged to be the best obtainable for metal caps. Later this same year, we began manufacturing lacquer under this formula . . . and have

continued to do so ever since. As the demand for Phoenix Metal Caps has increased, our lacquer manufacturing department has expanded. Huge gas-fired kettles have replaced the small pots in which the product was first prepared. Through experience, experiment and study we have found better ingredients; we have improved our formulae; and have placed formulae, ingredients and manufacture of our lacquer under the supervision of well-trained and long-experienced chemists. Phoenix lacquer, today, is a *controlled* product—far superior to, and of uniformly higher quality than the original. It is well able to withstand the punishment of capping machine, the heat of retort and sterilizer, the action of food acids and moisture . . . and still retain its qualities of protectiveness and attractiveness. Thus we have spent thirty-one years not only *manufacturing*, but also *improving* the lacquer used on Phoenix Metal Caps. This is important to all users of lacquered metal caps—but especially to those who provide the tasteful, healthful and eye-ful glass packaged foods with which Mrs. Homemaker sets the great American table.

PHOENIX METAL CAP CO.

CHICAGO, ILL. • BROOKLYN, N. Y.

Branch Offices: Philadelphia, Baltimore, Boston, Cleveland, Cincinnati, St. Louis, San Francisco and Los Angeles.

MODERN PACKAGING

C. A. BRESKIN, Publisher

A. Q. MAISEL, Editor

JUNE 1940

VOLUME 13 NUMBER 10



JULY

Grocers use more counter displays than any other type (see the Institute of Package Research's survey, page 72, May). Tobacconists, druggists and other retailers likewise know the value of point-of-sale display. The net result—most intense competition for counter display points, with the odds favoring the unit that works by itself. The ins and outs of designing such dispensing displays will be covered—with a wealth of illustrations—in Modern Packaging's July issue, in a survey conducted by the Institute of Package Research.

All those on the anxious seat, who have been waiting to make their entries in the 1940 All-America Package Competition, are advised to be patient until the first of August when subscribers to Modern Packaging will find competition entry blanks and other details in their August issues.

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Speed-cartoned by the thousands on a streamlined REDINGTON

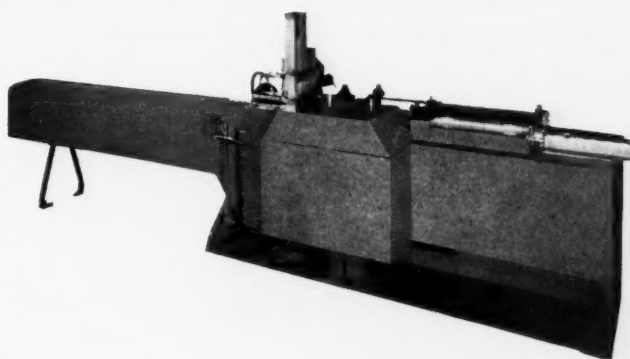
TOOTSIE ROLLS are one of the latest additions to the roster of nation-famed products cartoned on industry-famed Redington machines. The Sweets Company keeps costs down to a fraction of a cent per carton as a streamlined Redington speeds seven Tootsie Rolls into a neat package at the rate of 150 cartons every minute—2½ cartons a second!

This Continuous Loading Cartoner plays sleuth, too, with a *short count detector* that refuses to let any carton pass unless it holds the full quota of seven Tootsie Rolls.

But not all problems are as simple as this. Your carton, may require a corrugated protector . . . a circular . . . or a special insert. You may have several sizes, or a family of products to be cartoned on the same machine. Soundness of design and engineering guarantee an *efficient* long life for Redington Packaging Machines . . . whether they are used for usual or unusual packaging situations.

Why not *find out* what Redington can do for you? It costs nothing to check with us.

F. B. Redington Co. (Est. 1897)
110-112 So. Sangamon St., Chicago, Ill.



Redington Counters (below) with the new *Knob Re-set* feature are used on all Redington machines. This modern Counter can settle your counting problems for good . . . can be attached to packaging units and other types of machines. Model AR costs only \$7.75. Write for more details—there's no obligation.



REDINGTON

PACKAGING MACHINES ★

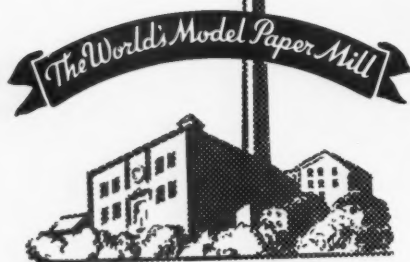
for CARTONING • WRAPPING • SPECIAL PACKAGING



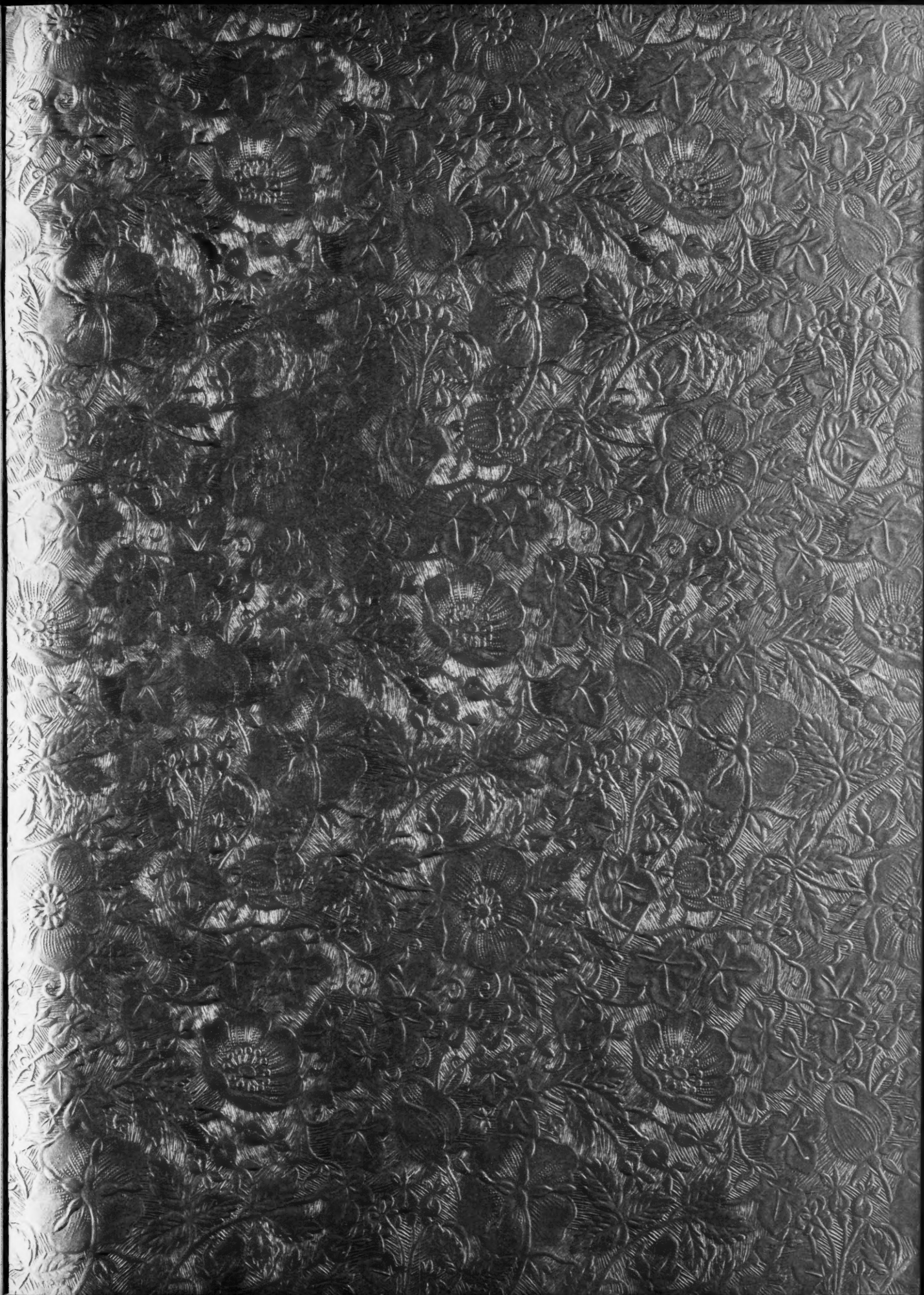
A good thought passed on by the makers of

KVP

**FOOD PROTECTION
PAPERS**



KALAMAZOO VEGETABLE PARCHMENT COMPANY
PARCHMENT, KALAMAZOO, MICHIGAN



Metalhue Emb. 275

This luminous metallic box paper may now be had at a popular price, which will make it suitable for large as well as small runs of boxes. It is carried in a wide range of colors in a plain finish and then embossed as may be specified.

Send for a new sample book and request work sheets in the colors and patterns best suited to your requirements.

HAMPDEN GLAZED PAPER AND CARD COMPANY Holyoke, Massachusetts

SALES REPRESENTATIVES

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New York, N. Y. — 60 East 42nd St.	San Francisco, Calif. — 420 Market St.
Toronto, Canada — 137 Wellington St. West	
Fred'k. Johnson & Co., Limited — 234, Upper Thames Street	London, E. C. 4, England
R. W. Davis — 335 Flinders Lane	Melbourne C 1, Australia

INDEPENDENT AND HELPFUL



Design and Color

Modern markets and merchandising methods put a premium on design and color. Containers must speak for themselves! They must attract attention and insure identification.

Whether your need is for a new package or the re-design of an old one, Crown Can is equipped to serve you swiftly —most satisfactorily—and at fairest prices!

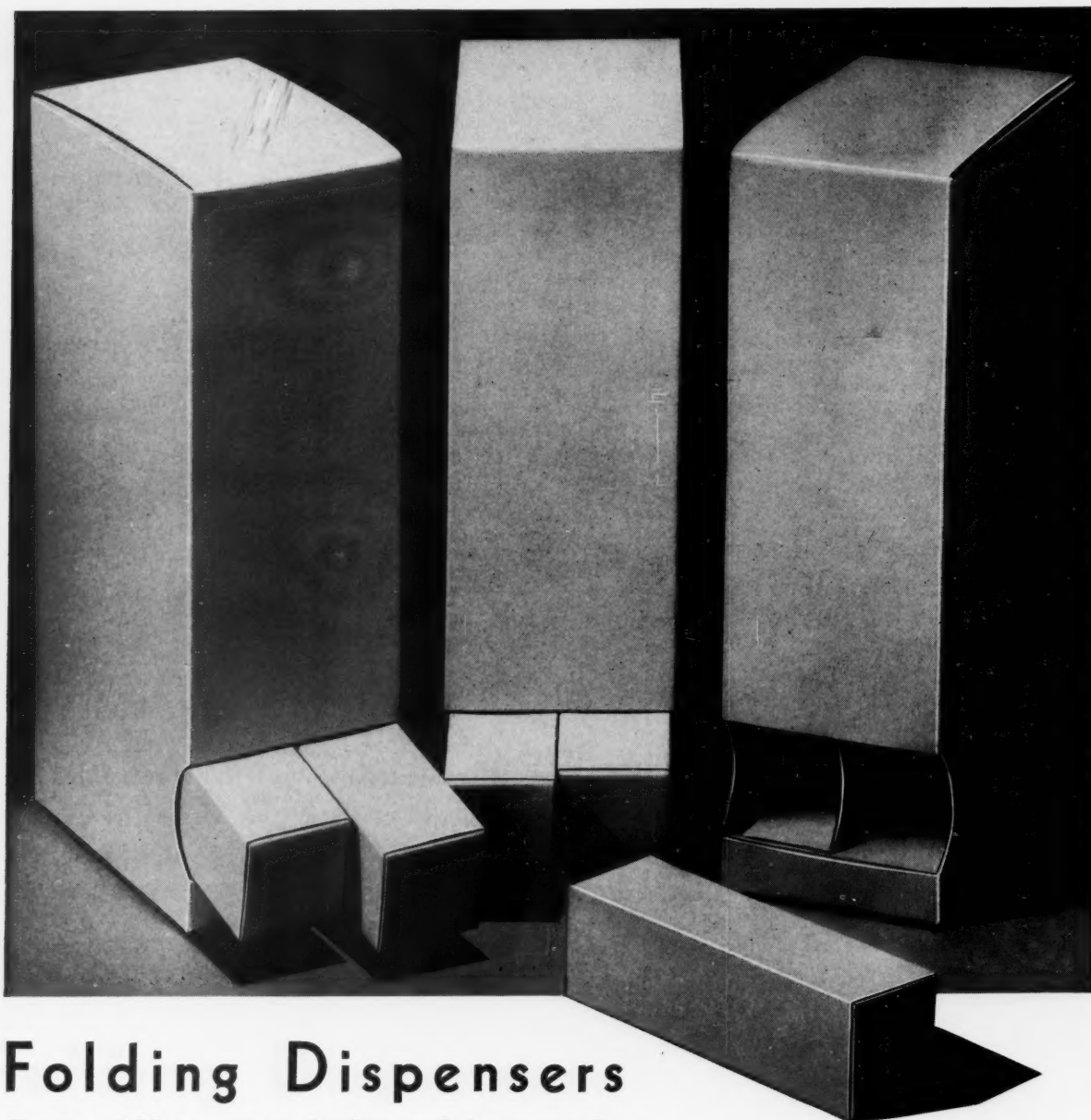
CROWN CAN COMPANY, PHILADELPHIA, PA.

Division of Crown Cork and Seal Co.

BALTIMORE ST. LOUIS HOUSTON MADISON ORLANDO

CROWN CAN

JUNE • 1940 5



Folding Dispensers

Compact folding counter displays and dispensers for small items are made by Warnercraft in a variety of practical forms. The type illustrated packs securely, ships safely, offers considerable area for display, takes but small counter space, and prevents handling and soiling of individual packages. With packaging experience in many fields our full time designing staff is qualified to cooperate intelligently with manufacturers in their packaging problems.

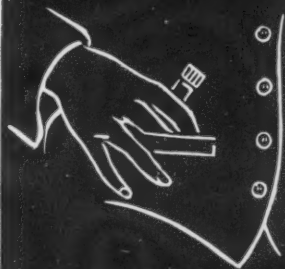
WARNERCRAFT
THE FINEST WORD IN PACKAGING

In the All-America Package Competition for 1939, Warnercraft boxes figured in four top awards—two in the Family Group; one in the Set-Up Paper Box Group; and one in the Miscellaneous Group.

THE WARNER BROTHERS COMPANY
BRIDGEPORT, CONNECTICUT
200 Madison Ave., New York, N. Y. ASHland 4-1195

KIMBLE GLASS VIALS

"CARRY CONVENIENCE"



To put these dainty, handy vials in pocket, purse or handbag is so easy and convenient that your customers can **CARRY** your product **WITH THEM** on their travels and in their daily routine.

Win more sales through "Carry Convenience" by standardizing on Kimble Glass Vials. There's a shape, size and closure design to meet your specific requirements!

For A NEW VERSION OF YOUR *OLD* PACKAGE
A RAPID ACCEPTANCE OF YOUR *NEW* PRODUCT *Consult Kimble*

© 1940, Kimble Glass Co.



• • • The Visible Guarantee of Invisible Quality • • •
KIMBLE GLASS COMPANY VINELAND, N. J.
NEW YORK • CHICAGO • PHILADELPHIA • DETROIT • BOSTON

JUNE • 1940 7



Space reservations are being taken for the most tremendous volume of packaging progress ever to be published—the *only* catalog of all the wide reaches of packaging—the *1941 Packaging Catalog*. Research is already well under way to make the 1941 edition even more comprehensive and complete than any of its famous predecessors, with definitive articles on every phase of packaging—methods, materials, machinery.

It has been estimated that the *1941 Packaging Catalog* will reach \$3,800,000,000 of buying power—95% of the total annual packaging expenditure as computed from U. S. Government Census reports. It will reach the top executives in the top firms doing this purchasing. And it is actually used in the day to day purchasing done by these men, for these firms, of packages, package parts, materials, machinery. Hundreds of letters from both readers and advertisers are on file in our offices to attest this fact.

Leading firms supplying goods or services to any or all the 40 important packaging industries choose the *Packaging Catalog* as the medium to carry their messages.

Reserve your space now and give your agency or advertising department time to prepare a better advertisement—one that will bring your message quickly to the attention of the country's leading packaging purchasers.

PACKAGING CATALOG

Published by Breskin Publishing Corporation

CHANIN BUILDING—122 E. 42nd Street New York, N. Y.



DEEP NIGHT

FOR MORE PACKAGE APPEAL

JUST AS THE NIGHT SKY MAKES THE MOON AND STARS STAND OUT... THIS NASHUA "VELOUR" PAPER WOULD MAKE A STUNNING BOX COVERING OR DISPLAY PAD FOR THAT "SUPERLATIVE" PRODUCT.

NASHUA GUMMED AND COATED PAPER COMPANY
NASHUA, NEW HAMPSHIRE

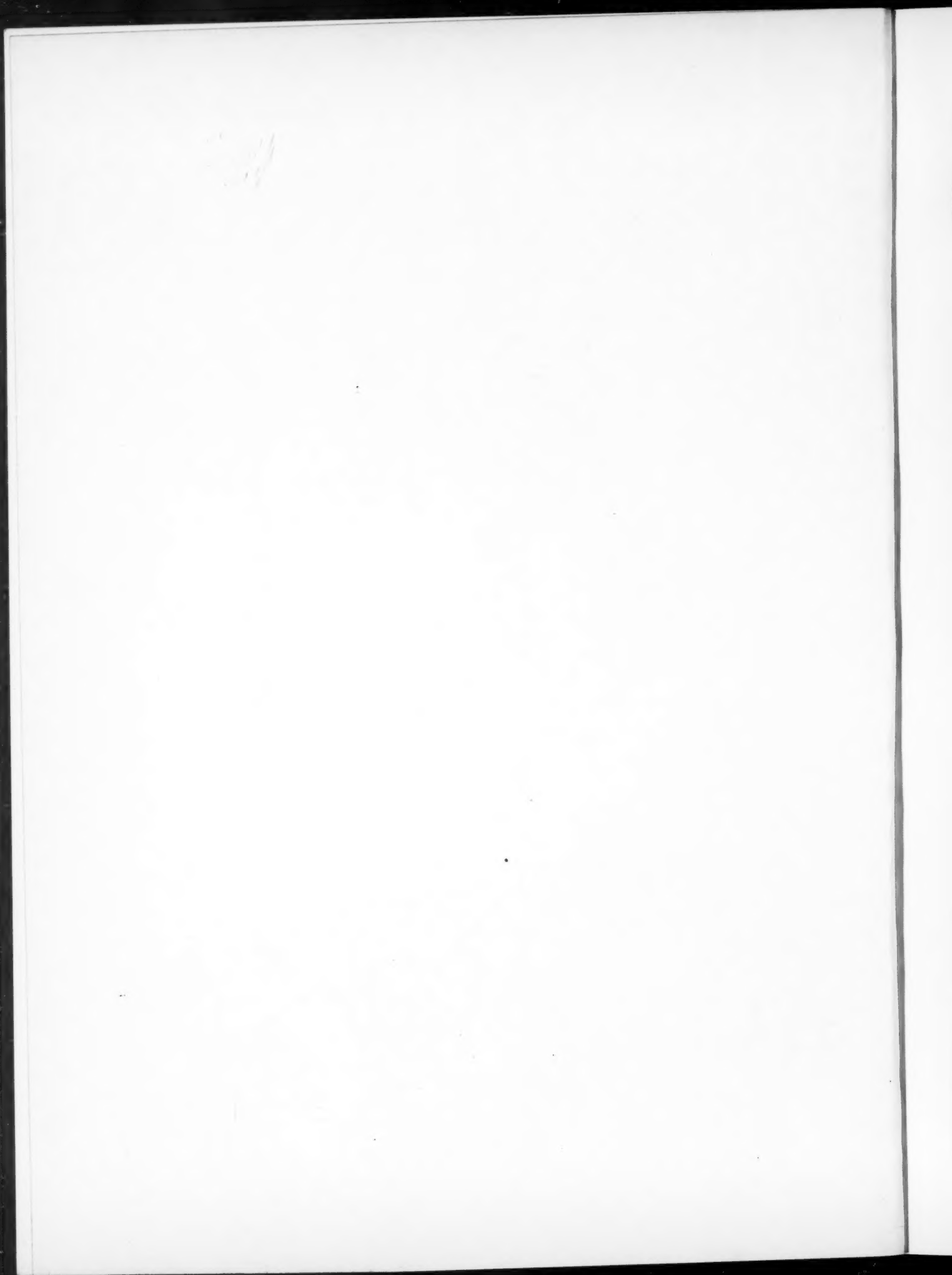
THIS INSERT STAMPED WITH NASHUA GLOFOLI



Look for the Nashua

NASHUA

Sign of a Nashua Value



DOUGHNUTS • FROZEN FOODS • DRUGS • CANDY BARS

TEA BALLS • TOBACCO • BACON • CARAMELS

CAKE • BREAD • TEA BALLS • TOBACCO • BACON • CARAMELS

Diafane

PROVEN PRACTICAL IN MANY FIELDS

Riegel's Diafane has quietly but effectively proven its value in many fields. Its low cost and attractive transparency have helped to accomplish this, of course, but its greatest value to most manufacturers has been the ease with which we are able to vary its technical qualities to meet each product's individual requirements.

Diafane can be laminated to other papers, or other papers may be coated with a Diafane solution. It can be made to seal in any manner, to work on special or standard packaging machines, to retard mold, to maintain either crispness or moisture, to prevent dessication. It can be tinted or colored even in small quantities, and it can be printed at very moderate cost.

Diafane has certainly proven its value, and its versatility is constantly increasing its field of use. Perhaps it can also serve you? Write us today, and investigate Diafane.

RIEDEL PAPER CORPORATION
342 Madison Avenue
New York, N. Y.

Riegel Papers



ANCHOR

FOLKS AREN'T PUTTING SYRUP AND MOLASSES ON THE TABLE NOWADAYS...

● Sales of syrup and molasses might be up, but you can always get a sigh from a processor for the good old days when the *per capita consumption* was sky high! That was when every American table had a big jar or pitcher of syrup or molasses on the table at every meal—and the whole family dived in!

Today you rarely see molasses on the table, and the syrup only comes out for hot cakes or waffles. Why? Surely America's taste hasn't changed!

The truth is that few syrup or molasses packages today are *fit to put on the table!* They're not practical. Hard to open. They don't keep their contents fresh and clean, because there's no way to close them properly.

But pack your syrup or molasses in a crystal-clear glass container sealed with an Anchor Amerseal Cap that's easy to use, easy to open, easy to pour from and quick to close—and watch your sales jump!

We would like to send an expert to your desk to give you the facts and figures on the sales possibilities of glass packaging your syrup and molasses.

You'd learn, for instance, that Anchor Hocking glass containers cost little if any more than other, less desirable types. That the switch-over to glass is quick, easy and inexpensive. And that *only* Anchor Hocking furnishes *complete* packaging service: containers, closures and sealing equipment.

A letter, wire or phone call will bring this man to your desk immediately. Send for him today. It will put you under no obligation whatever, and might point you to bigger, more profitable sales.

ANCHOR HOCKING GLASS CORPORATION, Lancaster, O.
Closure Subsidiary: ANCHOR CAP & CLOSURE CORPORATION
Long Island City, N. Y. and Toronto, Canada

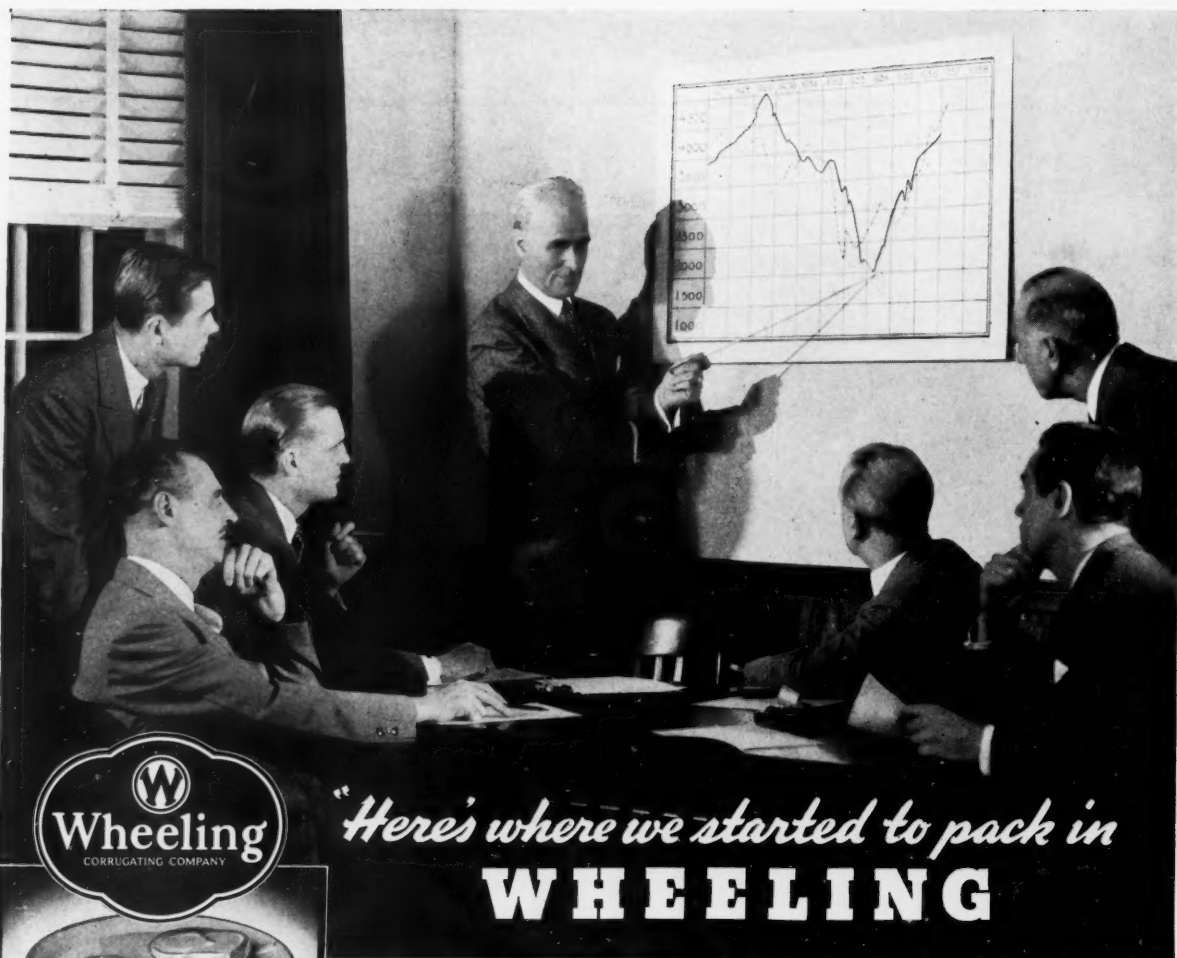
AND WE KNOW WHY!



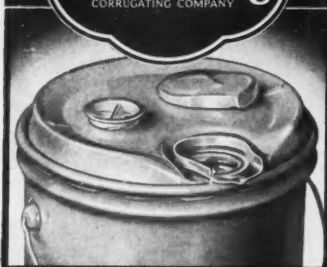
Anchor Hocking

an unbeatable
combination

GLASS
CAPS



"Here's where we started to pack in
WHEELING



Steel **CONTAINERS"**

● Sales react quickly when the trade learns that your product includes the last word in safe, convenient packaging. Wheeling Steel Containers—available in 1- to 70-gallon capacities—will give your product the ultimate in utility, accessibility, and security. Among our many items, we are sure to have the right container, with the right closure—and at the right price. Tell us what you pack, and we'll gladly submit samples.

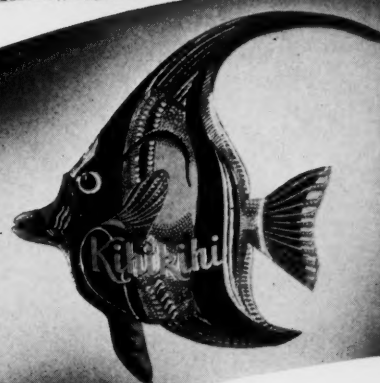
LISTEN TO THE MILL WHISTLE! Every Sunday 4 P. M., EST.
THE MUSICAL STEELMAKERS—Coast to Coast Mutual Broadcasting System

WHEELING
CORRUGATING COMPANY

General Offices: WHEELING, WEST VIRGINIA
OFFICES AND WAREHOUSES IN PRINCIPAL CITIES



For Gifts of Quality
CAMEO LABELS and SEALS
To give the effect of Quality



The sample and photographs of Cameo craftsmanship give you only the barest idea of the possibilities in embossed labels and tags. For cosmetics, textiles, fishing tackle, tobacco products and a wide variety of other products, embossed labels and tags have proven themselves important sales-builders.

Automatic production in three colors and to sizes hitherto unknown are available to give you economy and speed in fulfilling your orders.

There is no limit to the size and color that can be produced to fill special needs.

Our work is accurate to Hair-Line Register. Colors are crisp and clear. Designs are modern. A number of unique processes are available only at our plant.

Write or phone.



YOU'VE GOT TO BE GOOD TO
TELL THEM APART . . .

*-it's the same
with Metal
Closures!*

It's unfortunate but true that all metal closures look pretty much alike. How, then, can you hope to choose the best closure for your product?

You guessed it—you have to rely on facts and past performance. And here are two facts about closures which you can't afford to overlook in making your decision.

1. Your closure plays an important part in winning and holding consumer acceptance for your product. You really can't afford to use any but the best.
2. Making better closures for glass containers has been Crown's business for nearly half a century. The outstanding efficiency and dependability of Crown Closures results from Crown's long experience with sealing problems and how to overcome them. Their use is real assurance that, as far as the cap is concerned, there will be no dissatisfaction with your package.

Check up now on the facts about Crown Closures. . . Samples, full information and prices are yours for the asking.

CROWN CORK & SEAL COMPANY • BALTIMORE, MD.
World's Largest Makers of Closures for Glass Containers



THE DEEP HOOK THREAD

A notable CCS invention which makes Crown Screw Caps easier to apply, easier to remove . . . and the ability to seal tighter with the same application force.



VPO CAP

An exclusive CCS System of sealing which gives perfect hermetic sealing, with or without a vacuum, and provides exceptional convenience for consumers.



SLIP RUBBER RING

This exclusive "cut rubber" liner does not stick to glass. It is the ideal lining material for most types of vacuum caps.

IN THE LONG RUN —

CROWN CLOSURES

COST LESS..



SCREW CAPS VPO CAPS
LUG CAPS MASON CAPS
VACUUM CAPS CROWNS
DOUBLE SHELL CAPS
CAPPING MACHINERY

PRINTED

Acme Steelstrap

ACME STEEL CO.
CHICAGO

Combines

**PRODUCT IDENTIFICATION,
EXTRA ADVERTISING VALUE**

ACME STEEL CO.
CHICAGO

and

ACME STEEL CO.
CHICAGO

**SAFER, MORE ECONOMICAL
PACKING AND SHIPPING**

● Your shipping pack will do *double duty* when PRINTED Acme Steelstrap is used. Each shipment is "Bound to Get There" faster, safer and more economically. And it'll give you extra advertising value all the way.

By having your name, trademark, slogan or handling instructions attractively printed on Acme Steelstrap, *your* shipments can be easily and quickly identified by the receiver. Your cartons, boxes, bundles, or crates will stand out prominently in transit and in the customer's stock room. By eliminating the necessity of duplicate labeling of containers strap-bundled into a single shipping unit, additional time and money savings are made.

No special equipment is necessary. Printed Acme Steelstrap can be used with regular Acme tools—and will give you all the advantages of Steelstrap. Mail the coupon for complete information—no obligation. Acme Steel Company, 2843 Archer Avenue, Chicago, Ill. Branches and Sales Offices in Principal Cities.

COLORED STITCHING WIRE

ACME *ColorStitch*

Here's an easy, inexpensive way to add EYE-appeal and SALES-appeal to your display and shipping cartons. Colorstitch, available in all popular colors, will blend or contrast with the carton colors. Colorstitch has full strength and holding qualities—color will not chip or peel. Made in all standard flat stapling wire sizes—Colorstitch can be used economically on all carton stitching equipment. Mail the coupon for sample color card.



ACME
Steelstrap
PROCESS

ACME STEEL COMPANY

2843 Archer Avenue, Chicago, Ill.

- ☐ Send complete information about PRINTED Acme Steelstrap.
☐ Mail a Colorstitch sample color card.

Name.....

Address.....

City.....State.....

JUNE • 1940

15



Not 1...but 2

advantages when your package wears this band!



YOUR package has a bright extra touch of smartness and color when it wears an attractive, eye-appealing "Cel-O-Seal" cellulose band. But that isn't all! It's securely protected against tampering and contamination, too!

No wonder customers instinctively reach for products wearing these handsome bands. They know that extra care taken *outside* means extra quality *inside*. "Cel-O-Seal" bands lock closures to bottles, assure customers that your product is

as good and pure as when originally packaged! They're economical, too . . . cost only a small fraction of a cent each. "Cel-O-Seal" bands are applied quickly and easily by hand . . . no machinery or adhesives are needed.

We'll be glad to show you how attractive and secure your package can be with a colorful "Cel-O-Seal" band. Simply send a sample bottle complete with closure today. There is no obligation on your part, of course.

DU PONT

CEL-O-SEAL

TRADE MARK
BANDS

— Sold by —

E. I. DU PONT DE NEMOURS & CO. (INC.)
"CEL-O-SEAL" SECTION
Empire State Building, N. Y. C.

ARMSTRONG CORK COMPANY
GLASS & CLOSURE DIV., Lancaster, Pa.

I. F. SCHNIER COMPANY
683 Bryant Street, San Francisco, Cal.

Visit the Du Pont "Wonder World of Chemistry" exhibits at the New York World's Fair . . . and on the Boardwalk at Atlantic City

TRANSPARENCY?

COMPACT
STORAGE?

SENSITIVE TO
TEMPERATURE?

PACKAGE
DESIGN?

HEAT-SEALING?

MOISTURE
LOSS?

EFFECTIVE
DISPLAY?

DEALER
CONVENIENCE?

EASIER
FILLING?

LOWER
COSTS?

CONSUMER
CONVENIENCE?

CONSTRUCTION?

WET
STRENGTH?

COMPACT
SHIPMENT?

MOISTURE
GAIN?

BRAND
IDENTIFICATION?

GREASE PROOFNESS?

Menasha

FINDS THE  ANSWERS AND
FOOD PACKAGERS FIND THE PROFITS!

One MENASHA package increased sales by adopting visibility, while retaining needed protection. Another added flavor-freshness (which gained consumer preference) in a moisture-resistant MENASHA package. Lower handling costs resulted from improved construction of a third package. Still another adopted a sales-making MENASHA design which added "buy-appeal" and sales MENASHA'S answers are diversified in detail but alike in a common aim — to make more

profit for food packagers! Technical knowledge of paper and container manufacture is combined with practical knowledge of sales, distribution and merchandising. These are the ingredients of MENASHA'S packaging answers. Evidence of this successful teamwork is seen in every food store and in rising sales curves of food products carried to market in MENASHA packages. A question about your package? We're ready anytime

THE MENASHA PRODUCTS CO.

DIVISION OF MARATHON PAPER MILLS CO.

MENASHA, WISCONSIN • BRANCH OFFICES IN PRINCIPAL CITIES

Menasha's Precision Papers for Precision Packaging



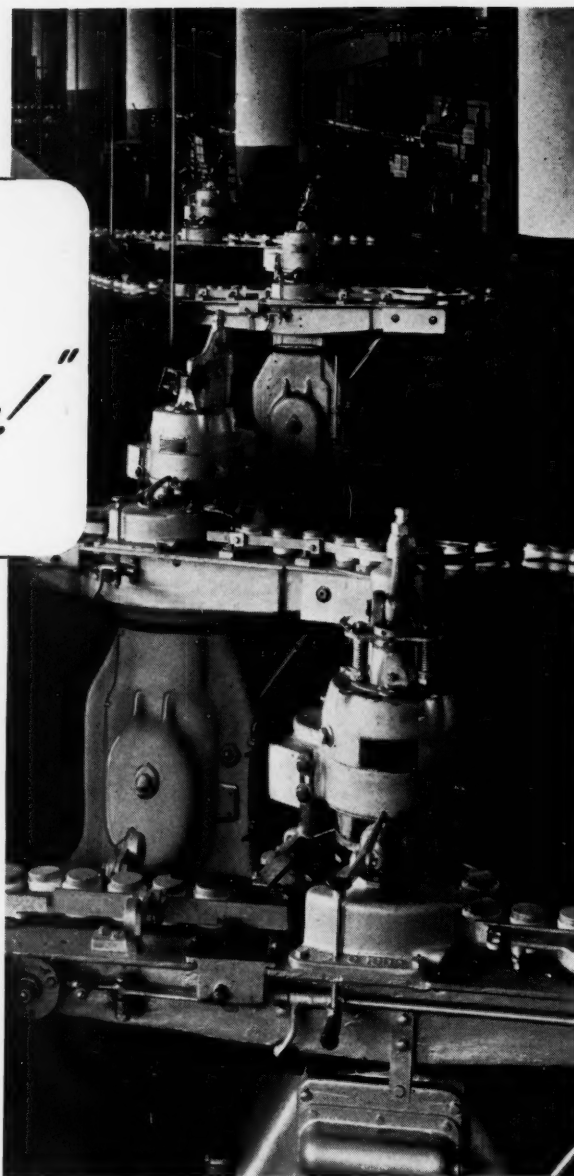
"Good looking!"
"Smooth working!"

"If sales prove anything (and what else does?) we have a most attractive cap in the R-O," says Pond's Extract Company. "The machines for applying R-O's are just as smooth working as the caps are good looking. In the 15 years we've used them we've never had any kind of trouble worth mentioning."

It's the women's vote that decides things. Their votes, in cash, for Pond's at toilet goods counters prove that R-O seals have ample style and sales-appeal.

From the production man's standpoint, the R-O is perfect. It's a tighter seal; holds volatile perfumes and prevents creams from drying out. Its original cost is low. Cap application is fast, efficient and economical. Machine maintenance is low. There's no cap breakage. Rarely any glass breakage. No rusting inside.

Proof... plenty of it... of every single one of these points of superiority is yours for the asking.

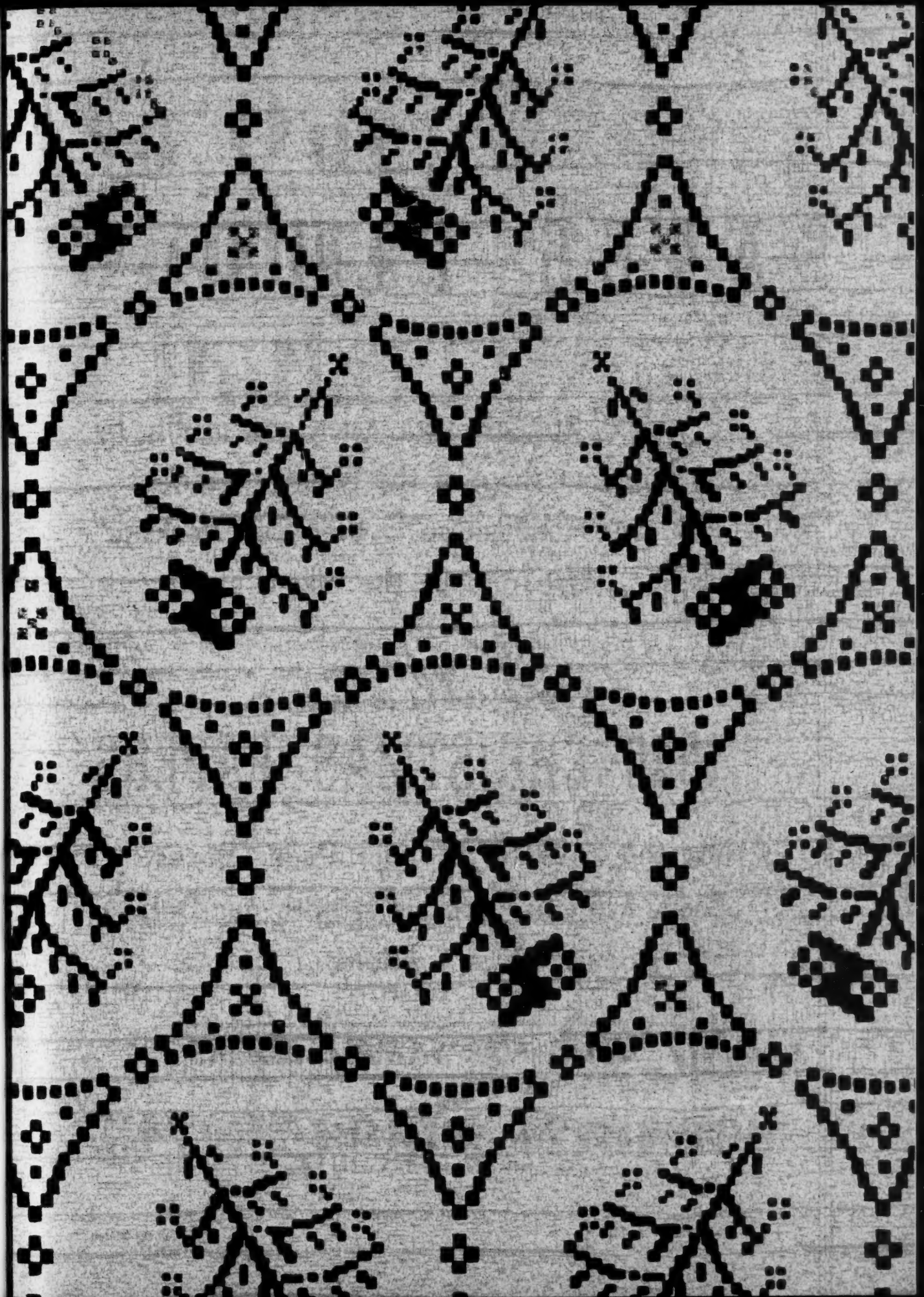


Four of a large battery of efficient semi-automatic AC Alseco Machines that apply attractive, tailor-made R-O seals at Pond's Extract Company, Clinton, Conn.

AT YOUR SERVICE: 26
YEARS OF EXPERIENCE
BUILDING QUALITY
SEALS AND SEALING
MACHINES TO FIT THE
NEEDS OF THE USER.



FOR SAMPLES AND
PRICES OF ALSECO
SEALS, WRITE ALUMI-
NUM SEAL COMPANY,
1345 THIRD AVE., NEW
KENSINGTON, PENNA.



SALES PLUS...

*I*NCREASE your sales and profits by getting your share of the Holiday business... Put your merchandise in the "Gift Package" class... Use one of the new —

Williams
1940 CHRISTMAS PAPERS

for the covering of your Paper Boxes... Many attractive designs in both our DeLuxe and Popular Price Editions.

SEND FOR SAMPLE BOOKS

CHARLES W. WILLIAMS & CO., Inc.

Authorities on Box Covering Papers

303 LAFAYETTE STREET
NEW YORK

624 So. Miller St.
CHICAGO

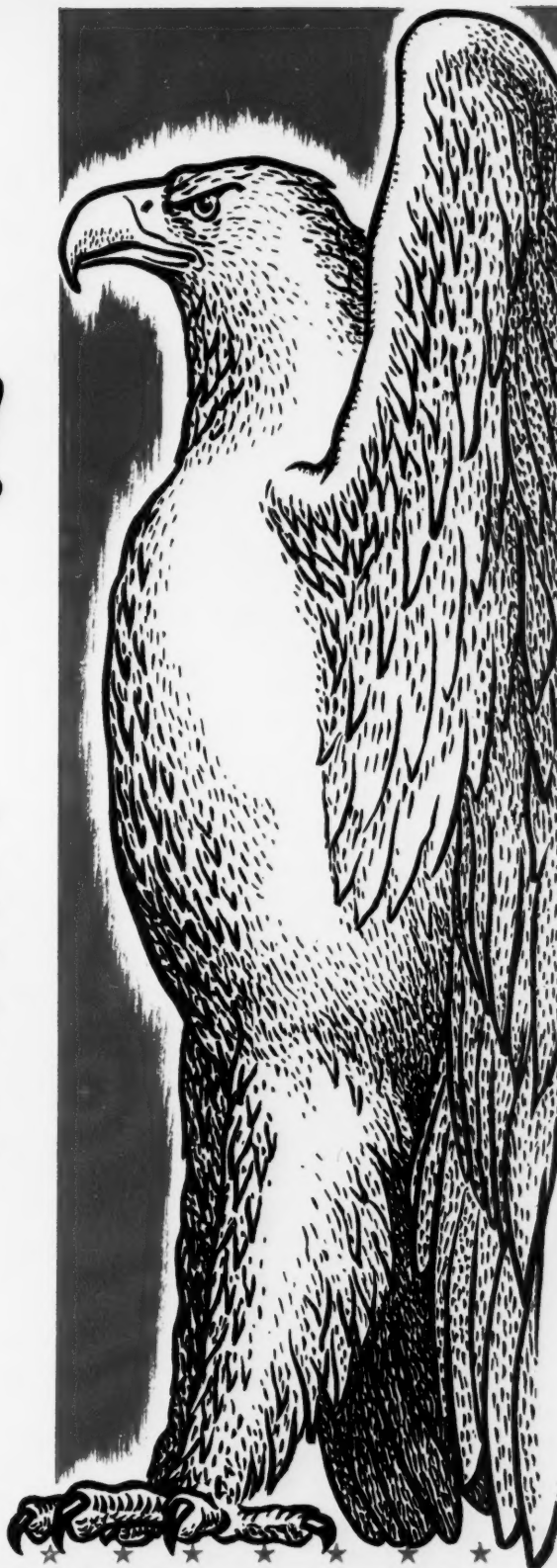
167 Oliver Street
BOSTON

No One Doubts a Dollar!

*The good old American Dollar..
our national currency standard
..envied medium of exchange in
any man's country! Who doubts
its background of VALUE?*

ALSO with measurable certainty . . with a background of brilliant merchandising successes . . "NATIONAL" Containers will affix a seal of value upon *your* product in commodity exchange. ★ When buyers pause before competitive counter display "NATIONAL" Packaging *convinces* . . swings the sale . . opens the way to repeated business.

No One Can **DOUBT** Value
Packaged **"NATIONAL!"**



NATIONAL CAN CORPORATION


SUBSIDIARY OF McKEESPORT TIN PLATE CORPORATION

EXECUTIVE OFFICES • 110 EAST 42nd STREET • NEW YORK CITY

Sales Offices and Plants • NEW YORK CITY • BALTIMORE • MASPEETH, N. Y. • CHICAGO • BOSTON • DETROIT • HAMILTON, OHIO

JUNE • 1940

19



If you require
STEEL RULE
for any purpose the
logical source is . . .
HELMOLD'S
the standard for 50
years, due to Quality,
Uniformity, Durability,
Accuracy.

J. F. HELMOLD & BRO., Inc.
1462 Shakespeare Avenue, Chicago



WATCH THE MAN ON THE STOOL ... he's a boxboard character reader

He'll show you why Gardner-Richardson Engineered-Precision Cartons are brighter, more uniform.

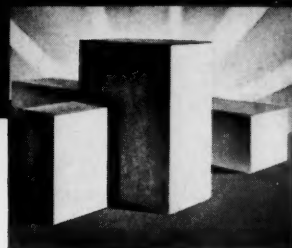
IN COMES a sample of boxboard—still hot from the dryers of one of Gardner-Richardson's tremendous machines. Now watch the man on the stool give that board a final check before it's delivered to the printing department or shipped to a customer.

Look! He's checking the surface for hills, hollows and fuzz. *Good board is level*—and the fibres lie tight. Will it score and bend without cracking? How does it seal? This quality-control man reads the character of the board—makes sure it measures up to Gardner-Richardson specifications.

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It will pay you to investigate Gardner-Richardson Engineered-Precision Cartons. Write.

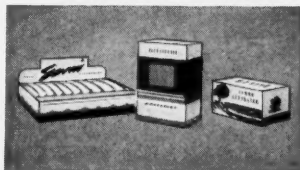


Brighter . . . because Gardner-Richardson boxboard, ink, printing and carton specialists work to the most exacting standards.



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LITHWHITE is a smoother, whiter, economical boxboard that prints with extraordinary color brilliance, gives cartons greater display value.

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The GARDNER-RICHARDSON Co.

Manufacturers of Folding Cartons and Boxboard

MIDDLETOWN, OHIO

Sales Representatives in Principal Cities: PHILADELPHIA • CLEVELAND • CHICAGO • ST. LOUIS • NEW YORK • BOSTON • PITTSBURGH • DETROIT



THIS SYMBOL is your assurance of greater uniformity, higher quality, better appearance, better product protection—profit and satisfaction.

JUNE • 1940 • 21

MODERN PACKAGING helps grow a desert oasis

It has become a truism that Modern Packaging is to be found on the desks of the top executives of firms which package America's leading merchandise. It is not every day, however, that one finds a file of Modern Packaging prominently displayed by a successful business man who makes his living in the middle of a desert!

R. C. Nicoll of Thermal, California, started with a roadside stand in his small desert oasis in which he sold dates from his palm grove. On seeing a copy of Modern Packaging some years ago, Mr. Nicoll was inspired to expand his business through the medium of packaging. He developed several gift boxes and shipping containers from principles he learned in the magazine, buying package parts and services from Modern Packaging advertisers.

Today, through sound merchandising and unique packaging, Mr. Nicoll has become an important customer for Modern Packaging's advertisers. His packages have twice taken All-America prizes. He reads Modern Packaging consistently—and is so pleased with the magazine that he keeps a complete file on view at his place of business.

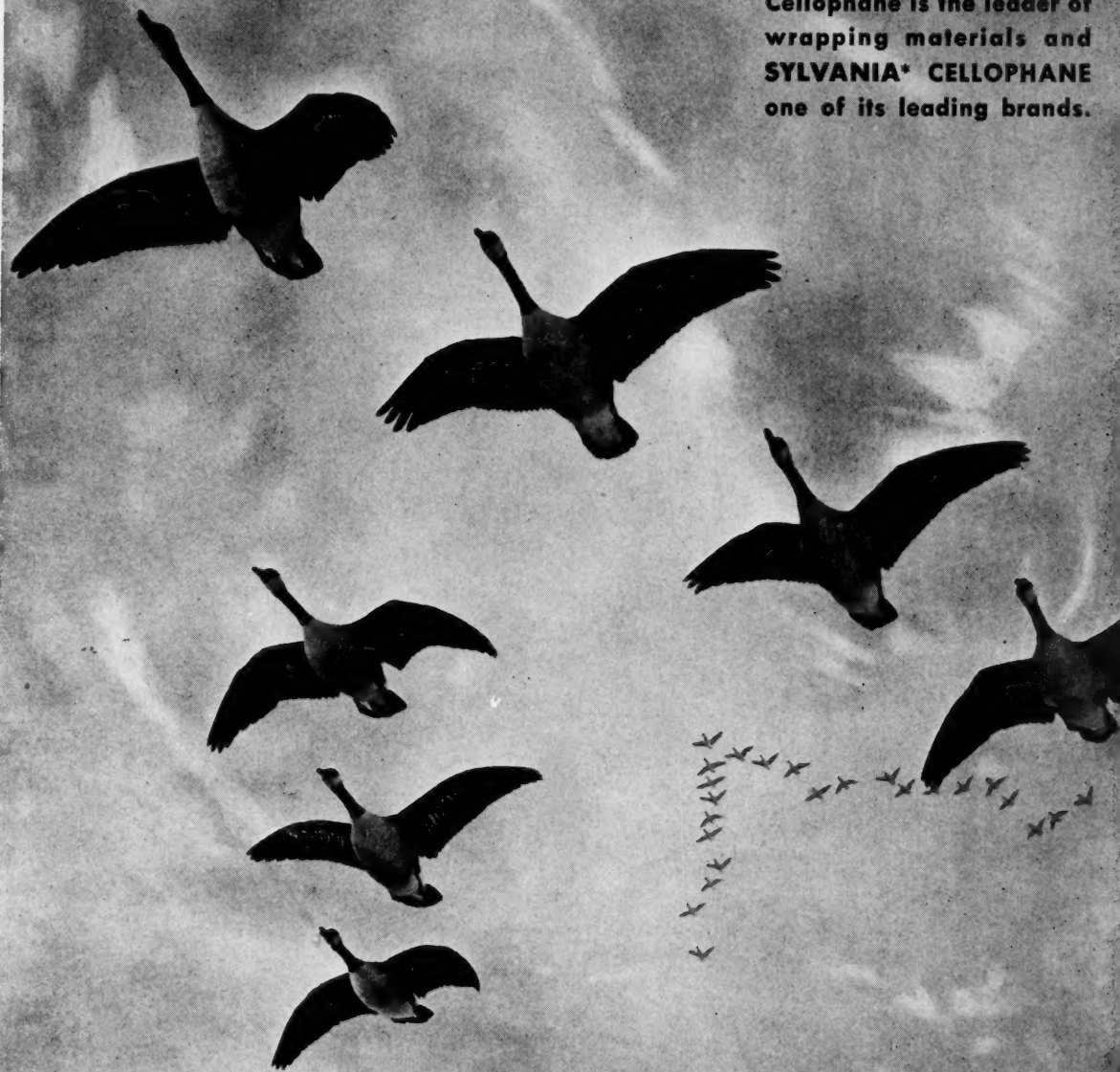
We mention this interesting story as proof of Modern Packaging's pioneering efforts to build its industry, an endeavor at which we have consistently labored since the magazine's inception.

MODERN PACKAGING
published by BRESKIN PUBLISHING CORPORATION
Chanin Building, 122 East 42nd Street, New York City

Photographs by
John W. Hilton

Leadership

Cellophane is the leader of wrapping materials and **SYLVANIA**[®] CELLOPHANE one of its leading brands.



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Sylvania Cellophane

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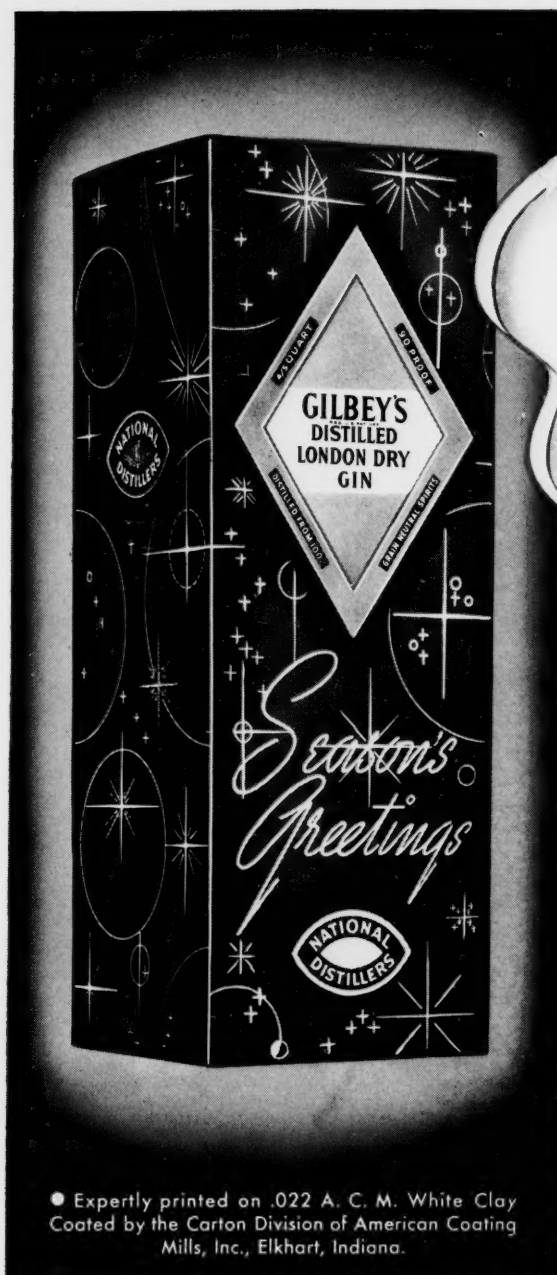
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COLLAPSIBLE TUBES UNITAINERS

INSPECTION AND PACKING

SUN TUBE CORPORATION
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• Expertly printed on .022 A. C. M. White Clay Coated by the Carton Division of American Coating Mills, Inc., Elkhart, Indiana.

Consider
A-C-M CLAY COATED
FOR YOUR Holiday Packages
THIS YEAR!

Quality and distinction must be reflected in every detail of a successful holiday package. That's why GILBEY'S and many other progressive holiday merchandisers change over from UNcoated carton boards to A.C.M. CLAY COATED! For, holiday colors snap and sparkle with new brilliance when printed on the velvet-smooth clay covered finish of this finest of all carton boards. Repelling dust and dirt... extra tough and rigid... A.C.M. Clay Coated more effectively resists the hard handling of busy clerks and shoppers

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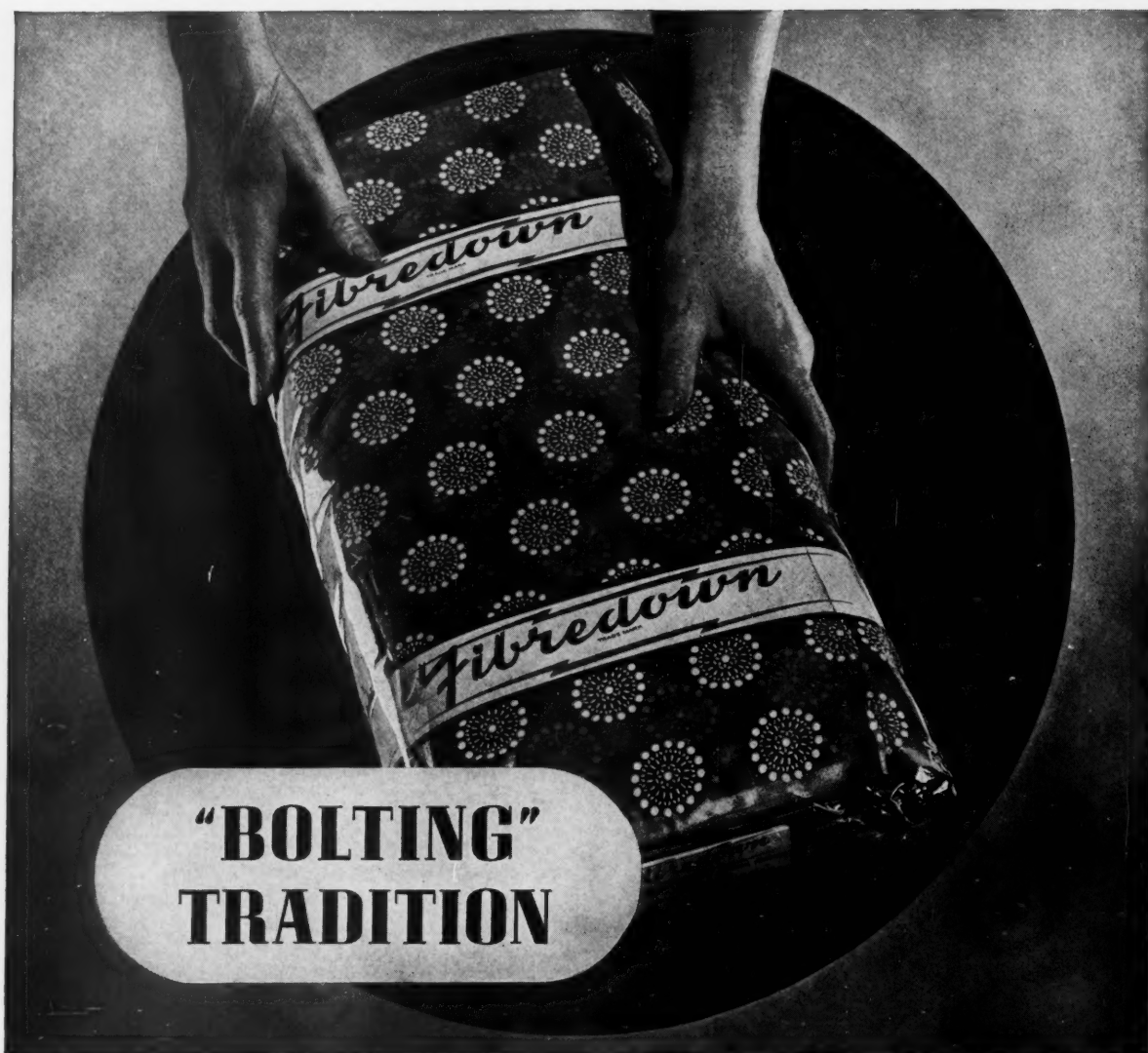


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The trend
is toward

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"BOLTING" TRADITION

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Dry goods dress up with

THE dry goods store of grandmother's day never saw anything like this. But you'll see more and more of it from now on! A Lumarith Protectoid transparent wrap gives a bolt of cloth all the visibility you could ask for—and protects against handling at the same time!

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LUMARITH PROTECTOID

If you are working on a transparent or plastic package . . .

Get in touch with
CELLULOID

*also Headquarters
for PLASTICS*



Consumer

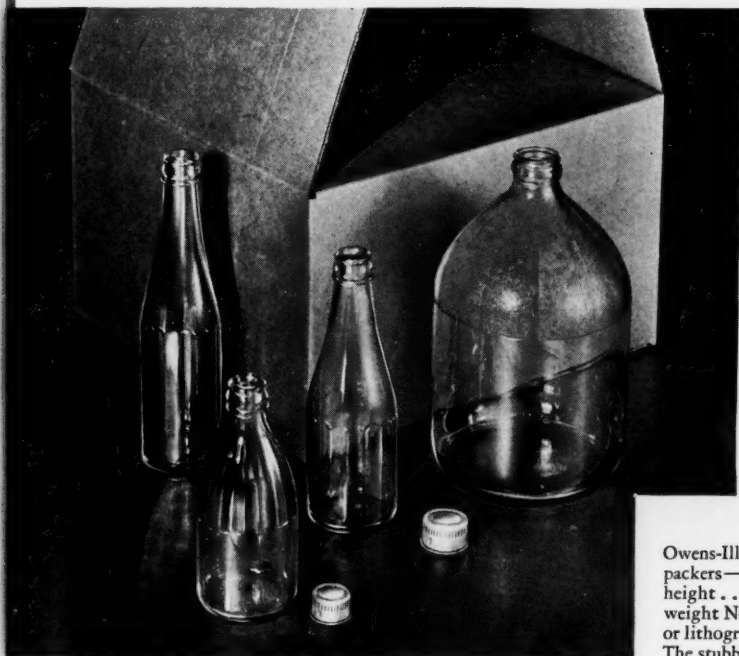


Cost Accountant



Production Man

You must look at *Salespackaging* ... through the eyes of ALL THREE



But don't allow any *one* of them to "rule the roost." Our years of experience will save you that. We'll help you develop a consumer-preferred *Salespackage* that won't make your production man tear his hair, or your cost-accountant write with red ink.

Three types of our men work for you. Not content with the known consumer-preference for glass containers, O-I Marketing Men ring doorbells . . . find out what size and shape of container, what type of closure consumers prefer for *your* product. Meanwhile O-I Research Men study your product's make-up and chemistry. Then, combining all the facts, O-I Designers and Production Men create for you a consumer-preferred, high-quality glass *Salespackage* that you can buy without overspending. It will be a complete *Salespackage*—container, closure and shipping carton—together with money-saving ways for factory-handling all three.

Let an O-I representative explain complete *Salespackaging* service to you. Owens-Illinois Glass Company, Toledo.

Owens-Illinois offers a complete *Salespackage* service to catsup packers—the regular catsup bottle . . . the popular medium-height . . . the handy streamlined stubby . . . the new low-weight No. 10 for bulk packing. O-I service includes also plain or lithographed closures and sturdy corrugated shipping cartons. The stubby and No. 10 are great for juices, too.

In O-I Salespackaging not one but THREE types of men work for you



O-I MARKETING MEN: report just what the final consumer wants in your *Salespackage*.



O-I RESEARCH DESIGNERS: mesh consumer preference with protection in your *Salespackages*.



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OWENS ILLINOIS
Complete Packaging Service
CONTAINERS • SAFEDOME TUMBLERS • CLOSURES • SHIPPING CARTONS
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WITH METHOCEL!

EYE APPEAL! That's what your paper boxes need to make them stand out over competition.

And that's where METHOCEL* comes in—the newest development in paper sizing. It helps give your packages an appealing touch of modern style and finish by allowing glossier ink effects. Investigate METHOCEL, the new paper sizing that will help you sell your product. Ask your carton manufacturer for further data.

Very small quantities of METHOCEL applied as a surface sizing are sufficient for these vivid ink effects. Any color ink may be used as METHOCEL is inert and colorless—won't affect the shade during application.

METHOCEL may be successfully applied at the stacks. It is available in six viscosity types which allow for a wide range of use. For more complete information write the Cellulose Products Division of

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

Branch Sales Offices: New York City, St. Louis, Chicago, San Francisco, Los Angeles, Seattle



*Trade Mark Reg. U. S. Pat. Off.



Give a thought to metal—or metal-plastic or metal-wood combinations—as a means of making your Christmas package stand out in the carnival of Christmas display.

Scovill—leading producer of such metal products as containers and closures for the drug and cosmetic industries—will help you create and produce a package that will take advantage of metal's virtues as a package material:

SALES APPEAL—a rich glow and feel that nothing but metal possesses.

STRENGTH—greater safety in transit (and adaptability for double-use container).

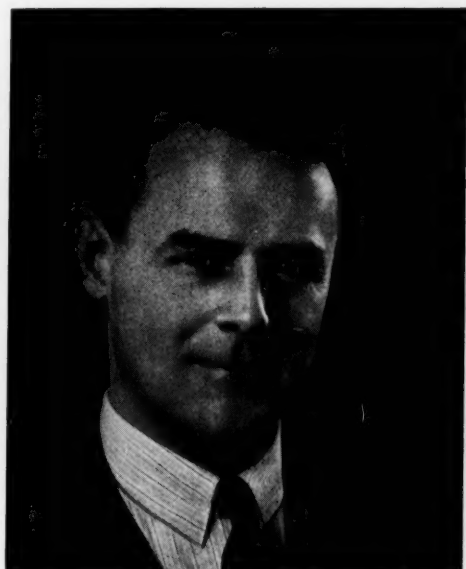
LIGHTNESS—as metal is inherently strong you often save weight and

cost of protective outer wrappings. Scovill works in brass, aluminum, steel, nickel-silver and many other metals, employing methods and high-volume equipment which make possible economical production. And Scovill offers special processes like: *Indurite finish for aluminum—resistant to moisture, scratches, heat, etc.* *Multi-color reproductions on metal.* So bring Scovill into your Christmas problem—or any other problem that involves giving your product more sales appeal and lower sales cost. Skilled creative assistance is available, working on bare idea, blueprint, or model. Get in touch with the nearest branch office—or write 25 Mill St., Waterbury, Conn.



Your Product Will Sell Better in a Scovill Metal Container

Boston, Providence, New York, Philadelphia, Syracuse, Pittsburgh, Detroit, Chicago, Cincinnati, San Francisco, Los Angeles
IN CANADA: 334 King Street, East, Toronto, Ontario



***Roger L. Putnam** is only 42 years old, but these have been a busy 42 years in which he has found time to serve as vice-president of the Package Machinery Co. from 1921 to 1927 and as president of that organization for the last 13 years. His business affairs have by no means formed the only field of Mr. Putnam's interests. He is now serving his second term as Mayor of Massachusetts' thriving city of Springfield, having been elected under the Democratic banner in 1937 and again in 1939. Mr. Putnam's viewpoint on proposals discussed before the Mahoney Temporary National Economic Committee is therefore a broad one, reflecting not merely the views of either a business man or a politician, but, rather, those of one who, as a business man, has long been concerned with public matters and has a thorough acquaintance with the problems involved in the administration of public affairs.

The case for packaging machinery

by ROGER L. PUTNAM*

When times are bad, some part of our business structure is generally made the goat. This has certainly been true in the past and it probably will be true in the future. Generally, this goat has been machinery and certainly at the present time, machinery, with its great productive capacity, is bearing the brunt of a lot of loose talking and loose thinking. From 1930, right through the depression, there have been recurring waves of articles and talk, blaming all unemployment on machinery. There is a wave of publicity in this direction right now, with the hearings being held before the Temporary National Economic Committee in Washington.

The advent of textile machinery in England, almost a century and a half ago, caused riots and destruction. In the great depression of the Eighteen Thirties, machinery again was blamed for much of the trouble, and it has been true ever since that machinery—particularly newly-invented machinery—is made the scapegoat for industrial ills.

The people who make these statements, who make the charges that machinery should be super-taxed or even abolished, never think the thing through. They are charges which probably were written on typewriters; they were certainly printed with linotype or monotype machines and high-speed printing presses. They may be sent over telephones or telegraphs, and at least they are transported by the mails, in trains, automobiles, and airplanes. The people making these statements could hardly get them read by any one or heard over the radio if it were not for modern invention and modern machinery. They have the mistaken thought that modern machinery and modern invention displace people who previously had jobs.

Of course, there are cases where this is temporarily true, but the big pioneering advances created jobs when none existed before. How many jobs did the radio displace? We all know it did not displace a single one; it simply created a whole new industry. Unfortunately, whenever there is progress, some people do suffer, at least temporarily.

A neighboring city to mine was once called the "Whip City," and I must admit that the manufacture of horse-whips has declined, but I believe there are more people employed in that city today, in the servicing and selling of motor cars and motor car products, and accessories, than ever were employed in making whips for the whole nation.

As Senator Mahoney, himself, has said, it is no solace to the steel mill worker, who is displaced by a huge automaton, that somewhere else the product of the machine is making a new industry. That steelworker, himself, is out of a job. That is an absolutely true statement, and we all know there are cases where machines do actually put some one out of a job.

Growth of Mechanical Production

This, however, is very, very, seldom true, especially in the packaging industry as I have been able to observe it. When packages were rare, 25 and 30 years ago, there were enterprising individuals—people, perhaps, ahead of their time—who put out complicated packages, done by hand; but today no one seriously thinks of putting out any package, in any quantity, unless it can be done mechanically. The only exceptions are certain luxury items and certain goods of an extreme novelty nature. The modern package just could not be produced without machinery, and the industry back of that particular package would not be an industry if packaging machinery were not available.

One of the outstanding examples is the chewing gum industry. Every one is familiar with the modern chewing gum package in which each slab of gum is individually wrapped to keep it from sticking to its neighbor. Five of them are packaged together in attractive wrappers, and the whole package is sealed to keep it fresh.

The modern chewing gum package just could not be produced by hand. Look at the present chewing gum package with all its wrappings to keep it fresh, and realize that the price is still five cents. Chewing gum is an article that has been improved steadily, and yet, in thirty-five years, its price has gone down while costs, in general, have been going up. Literally speaking, this industry would never have existed at all if it had not been for machines. We would still be back in the old spruce-gum days, and there would be thousands of people out of work.

But chewing gum is not the only article where packaging machines have been essential. Packaging machines have made possible the smaller packages that are displayed on news-stands everywhere. They have broadened the market; they have made possible for the child with a penny or the grown-up with a nickel, to get clean, sanitary, candy or food-stuff. They have provided a livelihood for those who make the products, of course, but they have also provided a livelihood for the operators of these small shops. Many of them are family businesses that could not have existed without the modern sanitary package of food and candy.

When new forms of packages, new styles, come in,

wholly new industries are created, with their accompanying jobs, that just would not happen if machines were not available. Every one of us can remember ten years ago, when the cigar and the cigarette industry adopted protective wrapping for their packages. It would have been a physical impossibility to wrap the cigars and cigarettes of the country in cellophane without machinery. It just could not and would not have been done, and we would still be getting our smokes too dry in the winter and too wet in the summer. But machines were available, and the whole industry adopted protective wrapping. At once, three sets of jobs were created: the jobs for the workers, who made the machinery; the jobs for the operators of those machines; and the jobs for the makers of the protective material. In the long run, there were more jobs still, because sales went up substantially when the smokes were protected. There were more machines and more operators and more tobacco growers and more salesmen.

Machines Create Work

When the technocrats, who were so influential a few years ago, talked about machines displacing men, they just did not look at the record. I believe, myself, that, in most cases, the advent of machines actually creates work, and we will all admit, in the long run, that it does so. Every one in the packaging machinery business could give example after example of where an article would not be produced at all if machines had not been available, but because machines were available, there were immediate jobs created.

It is time that all of us in the machinery industry made this point absolutely clear. It is time that we put across to the public in general, the fact that machines do actually create immediate work, much more often than they displace it.

Our own industry is a good example of this, but it is not the only one whose machinery makes work. How many of us would use our radios as much as we do if radio tubes had to be made by hand? New tubes would simply be out of reach of many of our citizens. If cheap radio tubes were not available, and if high-speed type-setting equipment and printing-presses were not available, the proponents of machine restriction would have no way of getting their ideas across.

I think it is, perhaps, time for us to read again Mark Twain's "A Connecticut Yankee in King Arthur's Court" to realize what machines have done for us, and what they are doing every day. We use them so much that we forget they are machinery. We don't think of our telephone, when we pick it up, as a machine. It is—it is a high-speed, automatic machine, and it is made on other high-speed automatic machines. If it were not, most of us could not afford one. Would we be able to afford our clothes or our shoes if there were no sewing machines? We would not go naked, but our wives would have mighty few dresses, and the great employment in the garment industry would fall, not increase, if sewing machines (Continued on page 90)

The Case for Packaging Machinery as Others View It

The hearings before the Temporary National Economic Committee which prompted Mr. Putnam to write this article were discussions of "labor-saving" machinery—the phrase being used in the most general of senses.

Allegations were made that machinery destroys employment opportunities and proposals were made for taxes of various types upon the introduction of new machinery. Mr. Putnam has here answered for the packaging industries—answered with facts, figures and arguments which we believe to be irrefutable.

Modern Packaging submitted Mr. Putnam's article, in galley form, to a number of leading figures, both among machine users and machine producers. Space does not permit the full reproduction of the remarks of all of these people, but the comments which follow are typical of the viewpoints expressed and surprising only in the unanimity with which they support Mr. Putnam's argument with additional facts and figures.

"There is little that I may say about Roger Putnam's article other than to endorse it wholeheartedly.

"The packaging industry has been a natural development as a result of public demand. Without it, the much-referred-to American standard of living would certainly be one for questionable reference. Obviously it follows that there could be no packaging industry without machinery for making the package and so-called technocrats; to the contrary, I have never seen any evidence that could be substantiated to prove that the development of automatic machinery for packaging has not been the source of increased employment and income to those of us engaged in this industry. I have often thought it would be extremely interesting to compile some information showing the total number of people employed by the packaging industry throughout its many ramifications. I believe the statistics would be startling in that I am sure they would reveal an unexpectedly large number of people. All of which is merely some idle thoughts on my part."

William M. Bristol, Jr.
Bristol-Myers Co.
Pres. Packaging Institute, Inc.

"Without automatic packaging machinery we would not have the money to properly advertise or merchandise our product. The result would unquestionably be such a drastic reduction in our volume that many presently employed would probably be thrown out of work and the earnings of the others would be materially reduced.

"The 'Case for Packaging Machinery' is sustained."

G. W. Posthill,
Vice President & General Manager
Life Savers Corp.

"A stroll through one of Woolworth's stores is an education to anyone who may doubt the value of packaging machinery. If we could have set for us today a typical Woolworth store of 1915, the object lesson would be only too clear. The broad range of articles for sale, at real values, today is brought about solely by the use of machinery. Human beings build this machinery, operate and supply it, make the materials which it uses in such tremendous quantities and sell the finished products to the consumer. Please ask the Technocrats where these people would be employed if there were no automatic high-speed machinery. If the steel mill workers are put out of work by the installation of an automatic machine, isn't it just as fair to consider the above-mentioned tremendous group of workers who are dependent today on the work of automatic machinery?"

"I would strongly urge every government official and legislator who reads this fine article to visit one or two of the magnificent modern plants such as Campana, in Chicago, or Bristol-Myers, in Hillside, N. J. Then have him attempt to visualize the glass, paper, corrugated box, cap, label, tube, carton and machinery plants which are supplying the materials and equipment. With this picture in mind, he cannot fail to appreciate the absurdity of the arguments against machine operation."

H. M. Bowman,
President
Unit Packages, Inc.

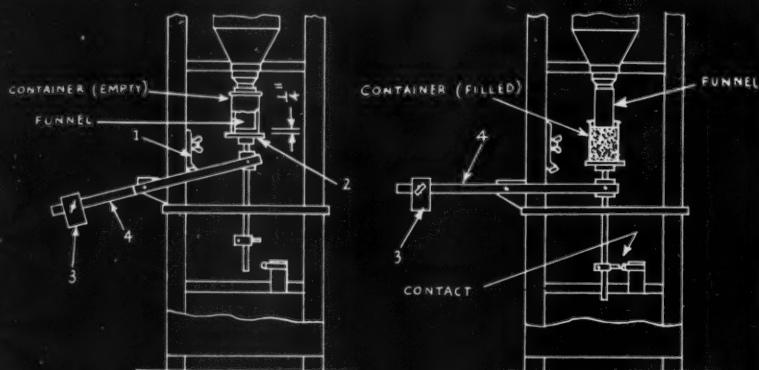
"About six years ago, our company purchased some modern equipment which enabled

(Continued on page 92)

Give Your Filling Machine A Chance

by C. E. SCHAEFFER*

The filling of dry products into containers is not necessarily a difficult process at all. But, like every other phase of package production, it can be made difficult if containers are not properly designed to meet the requirements of the machine or if the machine being utilized is not of a proper type or capacity, capable of meeting the conditions of operation which will be imposed upon it in the plant. Frequently, a few advance precautions or a few minor changes in packages or package procedures may make all the difference between extremely economical operations and slow, troublesome, expensive production.



1. Powders, granules and flakes, either free-flowing or non-free-flowing, may be classified as dry products. Powders are usually fed by auger or by vacuum or, in the case of free-flowing powders, can be measured with cups. Most powders require a certain amount of packing or crowding to fill the desired amount into the containers. An auger feed lends itself to almost any desired amount of packing pressure because the auger can go right down to the bottom of the container and fill under pressure from the bottom of the container to the top. The air in the container is displaced as the container is being filled, insuring a clean fill. There are certain limitations, however, to auger filling, the principal one being the size of the opening. Don't try to fill by auger if the opening is less than $\frac{3}{4}$ -in. diameter. While small augers can be made, they are not efficient.



NOT SATISFACTORY
FOR FILLING DRY
PRODUCTS



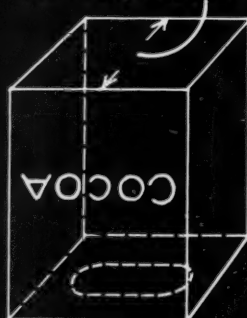
IDEAL FOR
FILLING DRY
PRODUCTS

2. The container seen to the left is an ordinary stock bottle, such as is used for liquid products. It has a $\frac{1}{4}$ -in. opening and is perfectly all right for liquid filling, but not for packing powders. One of the first decisions to be made is the size and shape of the container. It is surprising how many companies will decide to package a product and then pick out a container which may appeal to the eyes, but present plenty of headaches in filling. Now, if they would first consult with the machine manufacturers and the package designer, they would start with the right foot. The ideal container to fill is one with a full opening, the same size as the body, and the nearer approach to that, the easier is the filling operation.

LIMIT OF
AUGER DIAMETER



LIMIT OF
AUGER DIAMETER



3. A manufacturer, merchandising cocoa, was using a fiber-bodied canister with a tin top and bottom, filling through the oval opening in the top, this opening being about one-half the body size of the can. This meant that the auger could only be large enough to fit inside this opening and make a slow fill. The manufacturer changed the container so as to fill through the full bottom, then sealed the bottom on, after filling. By this method, an auger of the maximum size could be utilized and the filling speed almost doubled, showing quite a saving.

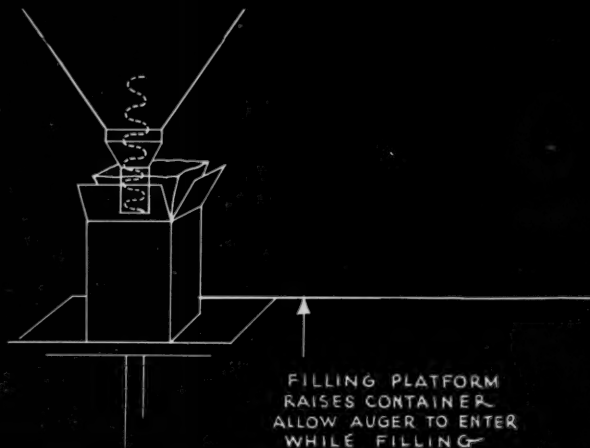
*Stokes & Smith Co.

4. Filling successfully considered of the fill in container cartons as head. In opening, difficulty there is a getting bet necessary t

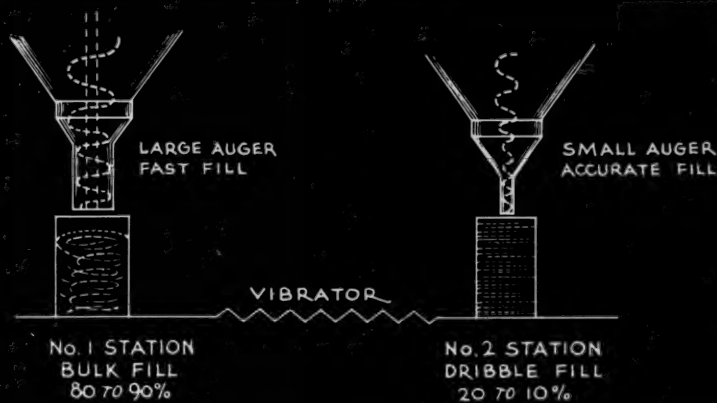
5. It is p 10 oz. or 12 at the first vibrator and way a large and a small accuracy of closer the a made with dribble. Li bags, etc.,

6. Another watch is th material to t chine. This portant point not enough th to this. In a product unifor adequate overhea be provided. machines hav them, but th posed to be a per. A large per, preferab hopper, prefer straight side bridging or, if floor above, a preferably wit taper, will insu supply to the help give a u

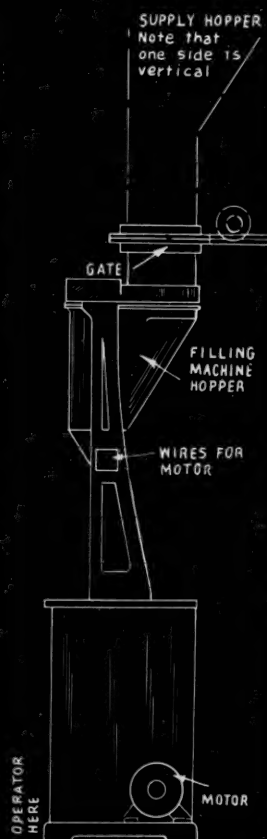
4. Filling powders by vacuum may also be used quite successfully, but here again the size of the opening must be considered. Of course, in filling by vacuum, the accuracy of the fill is governed by the uniformity or the volume of the container to be filled and a vacuum fill cannot be used for cartons as it is impossible to obtain a tight seal for the filling head. In the case of filling dry products, there is a full opening. When an inside bag or liner is used, there is often difficulty with the bag or liner not being fully opened and there is a chance of the material spilling over the liner and getting between the liner and the carton. It is, therefore, necessary to raise the container so that the funnel or spout enters the liner partway while filling.



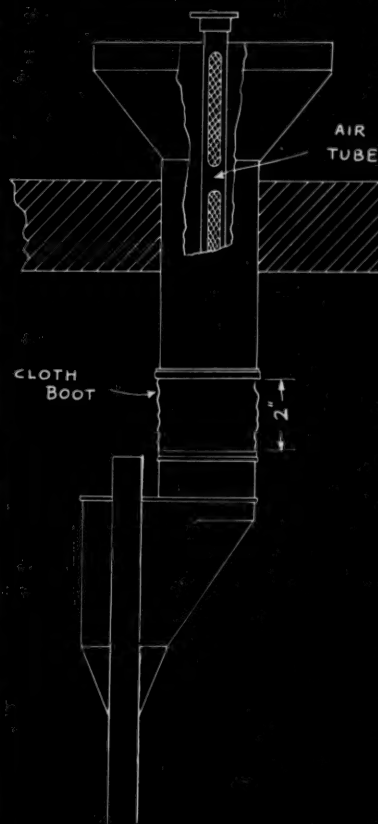
5. It is preferable, when filling powder quantities over 10 oz. or 12 oz., to fill at two stations, filling the bulk load at the first station, then going over a settling device or vibrator and check-weighing at the second station. In this way a large auger or feeder can be used at the first station and a small auger used at the second station for the desired accuracy of weight, because the smaller the stream, the closer the accuracy. For greater speed, the machines are made with two filling stations for bulk load and two for dribble. Likewise in the case of larger machines for flour bags, etc., there may be two bulk fills and one dribble fill.



6. Another element to watch is the supply of material to the filling machine. This is a very important point and so often not enough thought is given to this. In order to fill a product uniformly, an adequate overhead supply must be provided. Most filling machines have a hopper on them, but this is not supposed to be a supply hopper. A larger supply hopper, preferably with one hopper, preferably with one straight side to prevent bridging or, if fed from the floor above, a supply pipe, preferably with a reverse taper, will insure a uniform supply to the machine and help give a uniform fill.

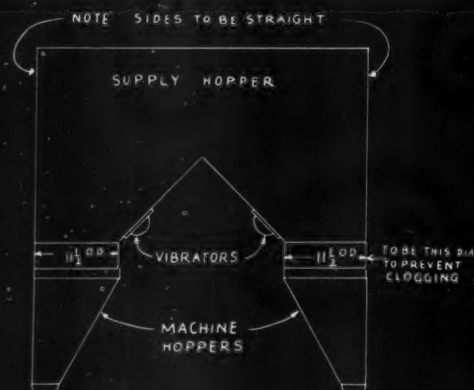


7. A great deal of trouble in filling powders is the air found in the powders. When powder is fed right from a mixer to a filling machine, the powder is usually filled with air which gives plenty of trouble, particularly if the powder has to be packed or crowded into the container. This condition can be avoided by putting a vent pipe right into the machine hopper which will allow the air to escape. Of course, if the powder can be allowed to settle for a certain time before filling, that will also help the condition greatly.





8. In order to eliminate the air from powdered products, electric vibrators may also be used advantageously. These are sometimes fastened directly to the machine hopper and also to the supply hopper above the machine. Illustrated here is a single material hopper. Note that the supply hopper is constructed with one vertical side and may be circular—or rectangular—in cross section.



9. It is generally advisable to have the vibrators so connected that they will operate only during the filling operation. If they are running continuously, they may settle the powder too much in the hopper and cause choking. It will be noted in the illustration that the two vibrators are attached directly to the rectangular supply hopper and are synchronized with the filling machine.

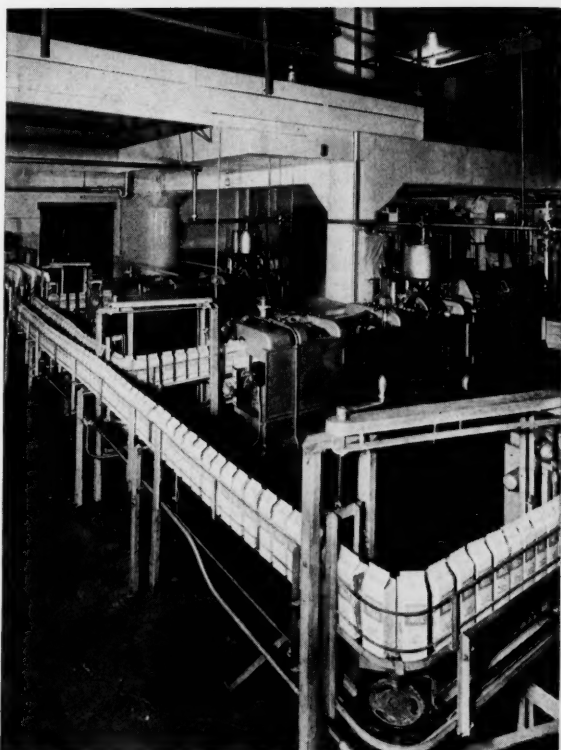
Another danger in filling powders is dust. This causes a great deal of grief. Many of the machines are now made with vacuum blowers or dust collectors built into the machine or, in a plant where there is a central dust-collecting system, hoods may be made around the filling heads and piped right to the central system. Portable vacuum collectors can also be obtained which can be attached right to the filling unit.

Granular products are generally free-flowing and do not present the difficulties common to powders. They can usually be measured by volumetric devices or filled by gross or net weight right into the containers and they may be vibrated or settled while filling.

Flakes require different methods of handling, according to their structure. They are usually weighed on a net weight scale or measured and then filled right into the container. Being lighter, it is generally neces-

sary to vibrate while filling or plunge or compress them into the container with a plunger. In this case, there is some chance for damage or breaking the flakes if they are very brittle.

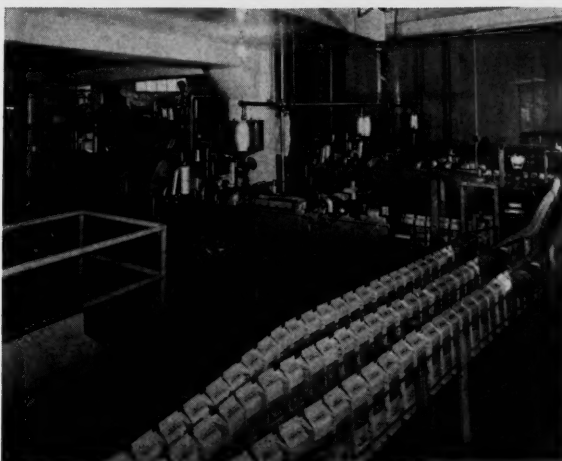
On account of the recent agitation regarding the so-called "slack-filled" containers, many people are considering smaller containers or putting more material in them than formerly. This is going to cause a few more headaches in the filling operation. It must be remembered that any filling machine has certain limitations regarding the amount that can be packed into a certain size container, the size of the opening and a number of other conditions. So, before making changes in your present package or container or before considering a new type of package construction, "don't try to do the impossible."



1. Right front of this illustration shows vertical hanger section in guides support for raising and lowering of section and sprockets next to the filler to accommodate half pint, pint and quart size containers as they come from the filler. Hand crank attachment by small roller chain to threaded bolt next to filler (chain is under the metal cover) raises and lowers section and sprockets. **2.** View in the cooling room where filled containers are taken from belt conveyor and placed in cases for storage and shipment. **3.** Another view of three fillers and three lines of milk containers traveling by two-plane chain conveyor to cooler.



2



3

Keeping conveyors flexible

Lucerne dairies use a single system to perform three distinct operations

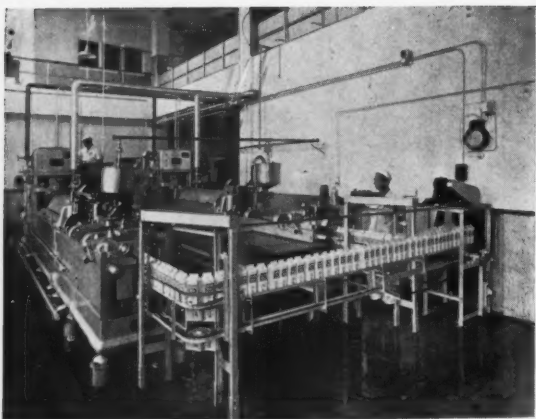
Conveyor systems have always been accepted by plants handling mass quantities of materials as an ideal means of effecting material movement through predetermined channels. In former years, however, conveyor systems were not particularly flexible and could not be readily adjusted to handle varied shapes and sizes of output or to operate at varying speeds under special circumstances.

More recently, a number of unusual developments have made practical the use of both chain and belt conveyors in plants where, formerly, materials were handled by much more laborious hand methods. An instance of the application of a number of these innovations is found in the experience of the Lucerne Cream

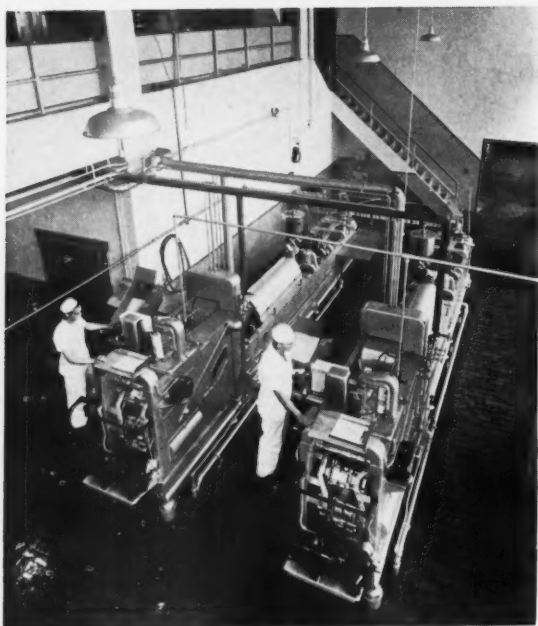
& Butter Co., operating dairies in Oakland and Los Angeles, Calif.

The company bottles milk in paper containers which are formed, filled and sealed on self-contained machines. Three of these machines are in use in the Los Angeles plant and two in the Oakland plant, each machine being adjustable for the handling of quarts, pints and half pints. On most installations of machines of this type, usual practice has called for an accumulating table at the discharge end of the machine with an operator or operators stationed there to place the product into storage or shipping containers.

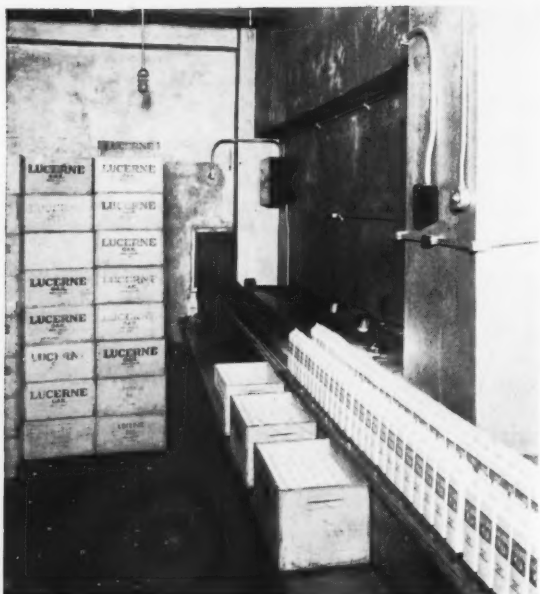
The Lucerne dairies' installation, however, is designed to take advantage of the fact that a single opera-



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tor in the cooling room, between the bottling machine and the shipping platform, could, at alternate periods, handle the output of the machines and the discharge of this output from the cooling room directly to the shipping platform.

To make this possible, it was necessary to install a conveyor system which would bring the filled bottles to the box or carton loading station in the cooling room. The problem was complicated by the fact that conveyor height had to be altered at the discharge point of the filling machine with every change in container size. This was necessitated by the structure of the filling machine which is adjusted for changes in container size by a raising or lowering of the trap upon which the containers rest in passing through the various stages of the filling machine.

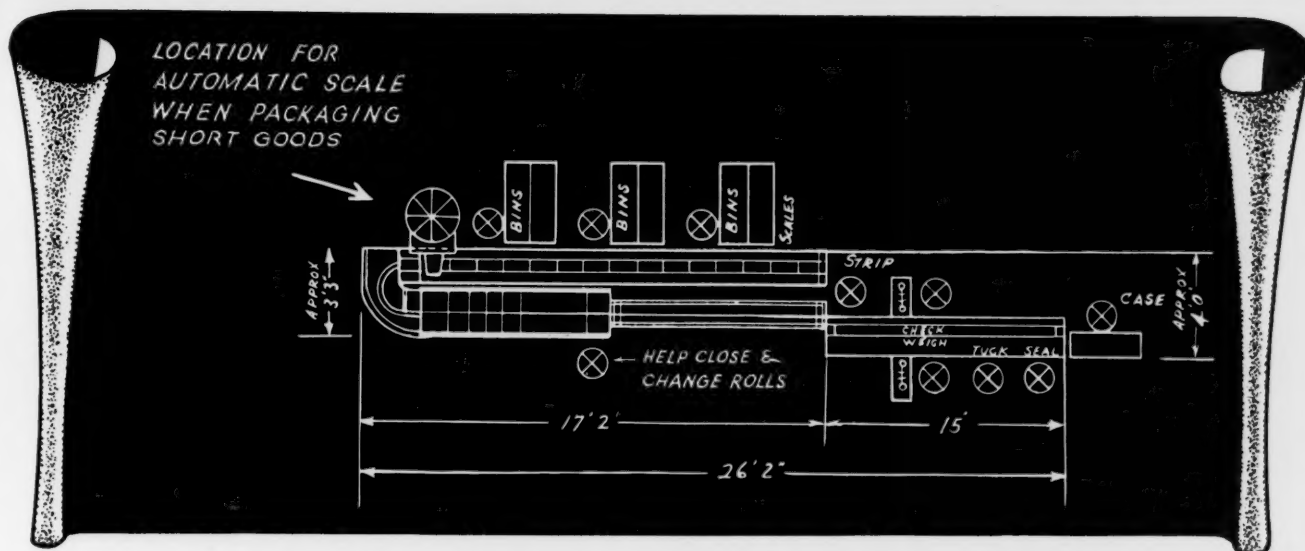
The problem has been solved by the use of a series of two-plane chain conveyors, specially equipped with a crank operated device capable of raising or lowering the section of the conveyor next to the bottling machine. Two vertical hangers support this section and are moved vertically between their supporting guides by means of threaded bolts to which are attached sprockets at the upper end. The sprockets are, in turn, connected by a small roller chain and thus both move in unison when the hand crank is operated.

The two-plane chain finds the change in conveyor height presenting merely another problem of achieving a relatively easy change of plane. The chain conveyors extend from the filling machines to the cooling room port where all chain conveyors discharge onto a single belt conveyor. This extends the length of the cooling room and onward to the shipping platform. When milk is being fed into the cooling room from the bottling section, the cooling room attendant may remove the cartons of milk from the belt conveyor and place them into storage containers at any convenient point along the line. When the time comes for discharge of the product to the loading platform, the same belt conveyor can be utilized to carry the storage containers to the delivery trucks.

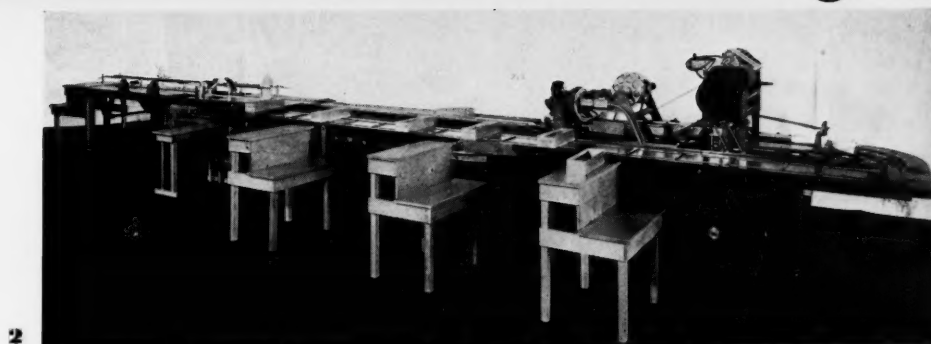
It was further desired that the belt conveyor be reversible so that empty storage containers could be brought into the cooling room when trucks returned from their trips.

To achieve all three of these functions, it was necessary to have a belt conveyor capable of operating at two forward speeds as well as in reverse. The conveyors installed in both Lucerne (Continued on page 88)

4. View of two lines of filled milk cartons being discharged directly onto two-plane chain conveyors from two filling machines. Note at right, containers going onto belt conveyor in cooler. Also a view of a raising and lowering section at 90 deg. turn to accommodate various size containers as they are discharged from the fillers. 5. View of filling room and chain conveyor. 6. View of belt conveyor in cooler from which containers are taken to fill containers for storage and later sent on out to delivery via same belt. Conveyor belt is variable speed and reversible.



1. Blueprint shows layout of container forming machine and mandrel conveyor as well as location of bins, check-weighing scales, etc.
2. The installation as it appears ready for work. Note the work tables or bins and the mandrels which may be seen on the conveyor belt and on the foreground work table.



Machine packaging for the noodle industry

Printed cellophane is achieving wide acceptance with the development of simple machinery facilitating its use

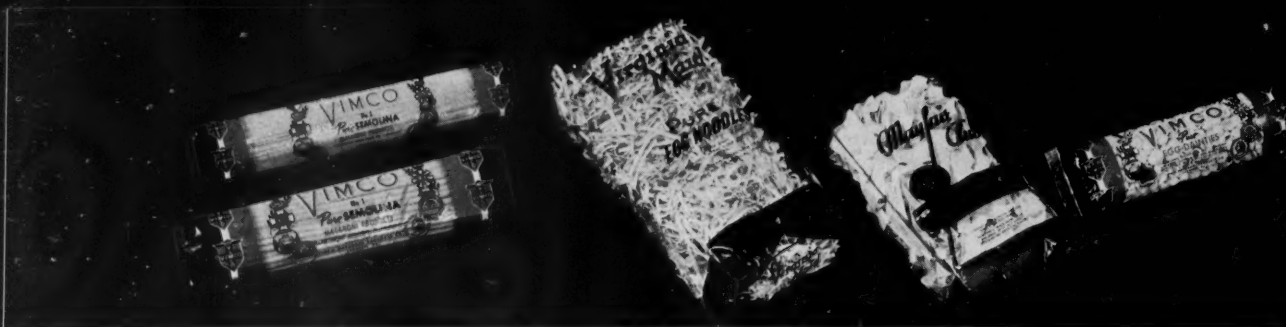
The noodle and macaroni industry has undergone several distinct revolutions in packaging practice during the last few years, having changed from a "bulk" or non-packaging industry into one utilizing cartons and opaque wraps and then having changed again to a point where a very substantial proportion of its product was cellophane wrapped. Today the industry seems to be on the edge of another such change in which the use of plain unprinted cellophane as a wrapping material may be discarded in favor of printed wraps applied automatically or semi-automatically. The plain material was utilized usually with paper labels or wrap-around bands because of difficulties in handling printed materials in view of the irregular shape of this industry's products. These difficulties have now been largely solved by newly introduced machines and a number of companies have recently adopted printed cellulose packages and installed the necessary machine

lines to permit the use of these containers which are of course more desirable from a merchandising viewpoint.

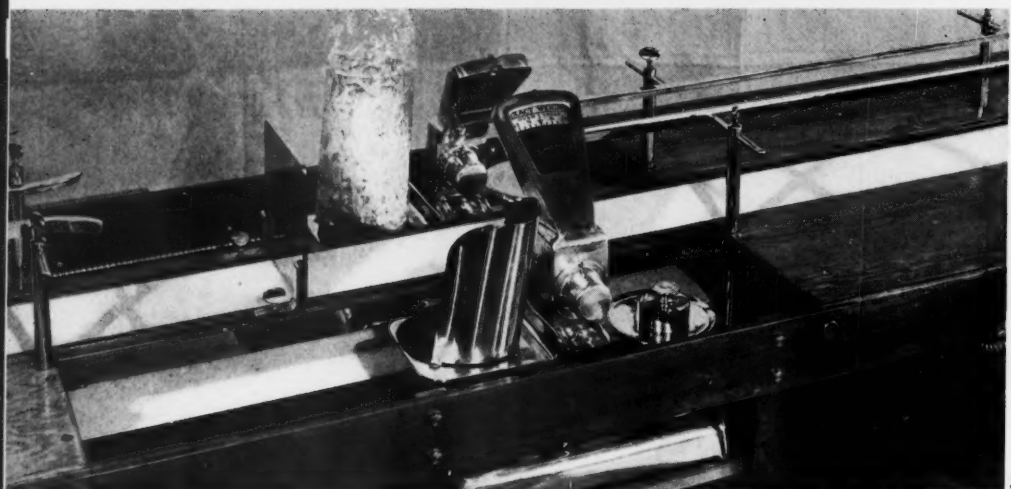
One of the first in this field has been the Viviano Macaroni Co. which has experienced very substantial increases in volume output on a wide range of items from egg noodles to spaghetti and in all three divisions of the field—noodles, so-called "short goods" as well as macaroni sticks.

As installed at the Viviano plant, the production unit consists primarily of a container-forming machine complete with a loading or filling conveyor. Open type mandrels are placed on the filling conveyor to be filled with the product and then carried into the machine. The filled mandrel passes through the machine, where a printed cellophane sheet, fed from a roll, is automatically glued, cut off in register and placed in the path of the incoming mandrel.

As the filled mandrel progresses through the machine,



3. A group of the many packages being filled on this equipment at the Viviano plant. 4. Check-weighing and sealing station for short goods. Table at left is for final delivery and cartoning for shipment.



5. Close-up view of check-weighing stations. The belt brings the packages to these stations. The fixture on the scale helps hold the packages erect. They are returned to the belt beyond the deflector for passage to the Scotch tape sealing station.

the bag is formed around it and sealed along the side seams. The mandrel with the bag thus formed and sealed is delivered at the end of the machine where the mandrel is extracted from the bag, leaving the product inside. The mandrel is then placed back on the loading conveyor to repeat the operation.

A special type mandrel, similar in shape to a shoe box, has been developed that has a hinged gate on the front end to allow the product to dump into the bag when the mandrel is extracted. This hinged gate is released by a lever at the back end of the mandrel when it is being removed from the bag. A set of 36 mandrels is required for each bag-size run on the machine.

Specially processed 450 PT cellophane is utilized so that in conjunction with a thermoplastic adhesive used on a container machine it will make a perfect heat seal on the side seams when the bag is being formed in the container machine.

In addition, this stock has the characteristic of a heat-seal closure at the top of the bag. This enables the customer to use power heat sealers for efficient closing. With the exception of the overlapping seams and 1½ in. on the top of the bag for the top closure, the stock is untreated 450 PT cellophane.

In addition to the container machine, the noodle packaging line utilizes one conveyor 16-in. long, one pair of wood stands to hold the check-weigh scales and a bin for noodles, required in the check-weighing operation. These are located on either side of the conveyor. One heat sealing machine complete with stand, one pair of high-speed check-weigh scales with special receptacles on weighing platter to hold the bag and one casing table.

To operate this equipment requires approximately 10 girls as follows: Three girls fill the mandrels as they pass by their filling stations located next to the loading

conveyor. The mandrels are taken off the conveyor, filled and then placed back on the conveyor to pass into the machine.

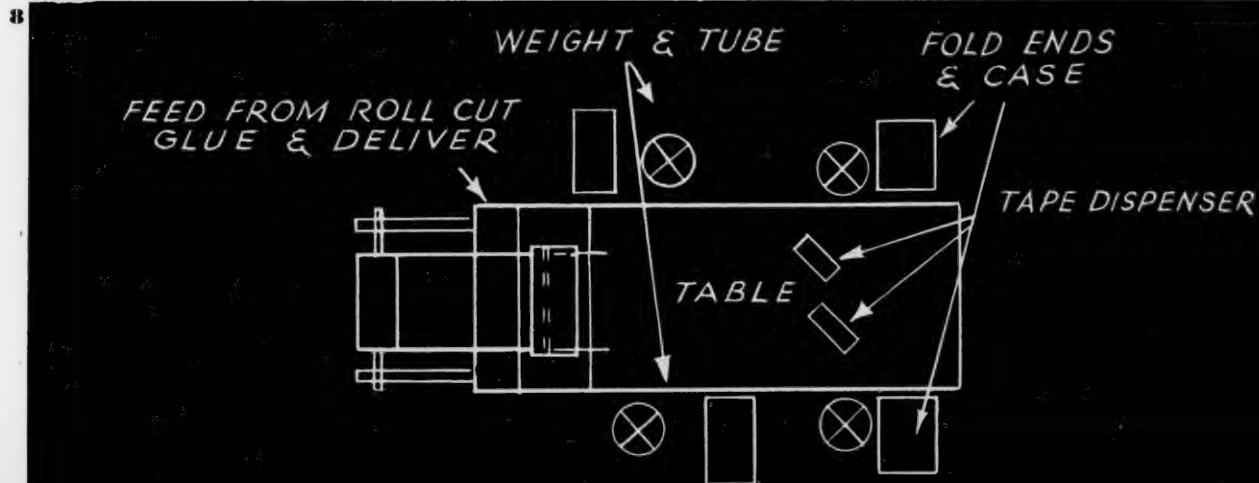
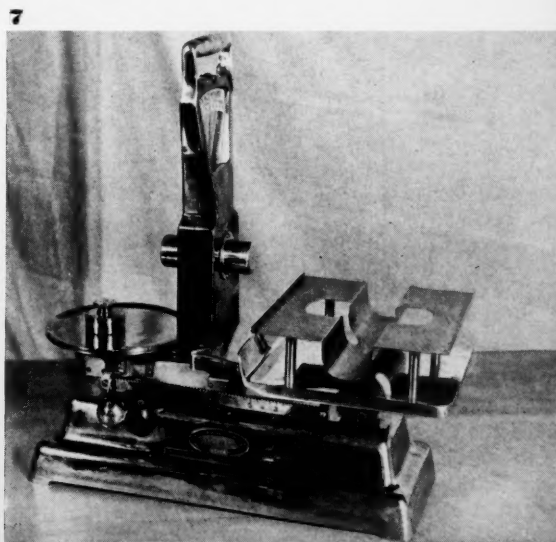
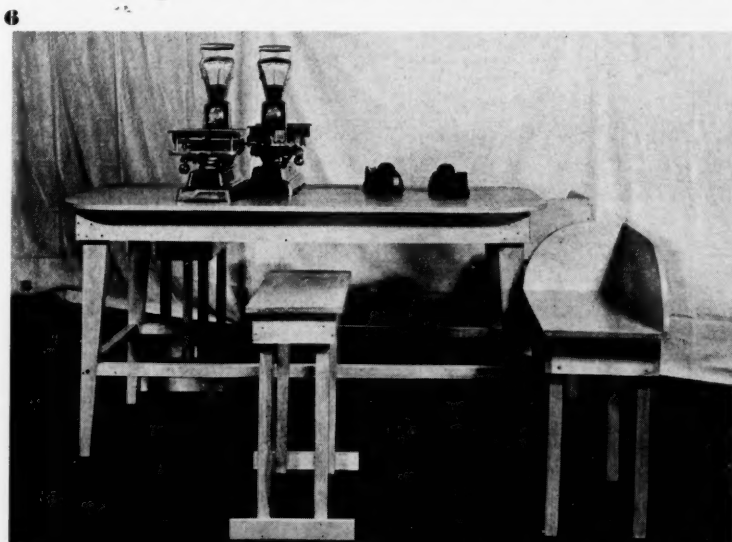
One girl at the delivery end of the machine removes the mandrel from the bag, leaving the noodles inside, places the filled bag on the check-weigh conveyor and returns the mandrel to the filling conveyor. The filled bag then passes along the conveyor belt to two girls who check-weigh.

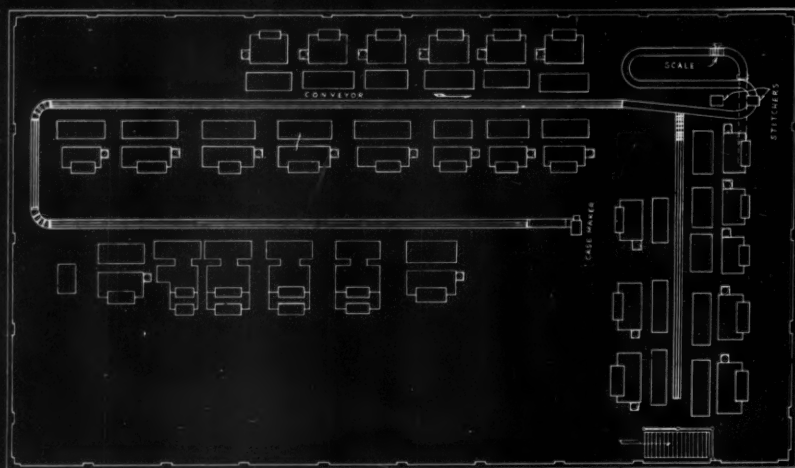
The bag is lifted off the belt onto a high-speed balance scale which is equipped with a special receptacle mounted on the weighing platter to hold the bag. The mandrels are so constructed that when filled to level,

they hold slightly less than the packaged weight. The function of the check-weigh operator is to add just enough of the product to bring the bag up to the correct weight. There is a small bin, conveniently mounted next to the check-weigh scales, to hold the necessary supply of the product.

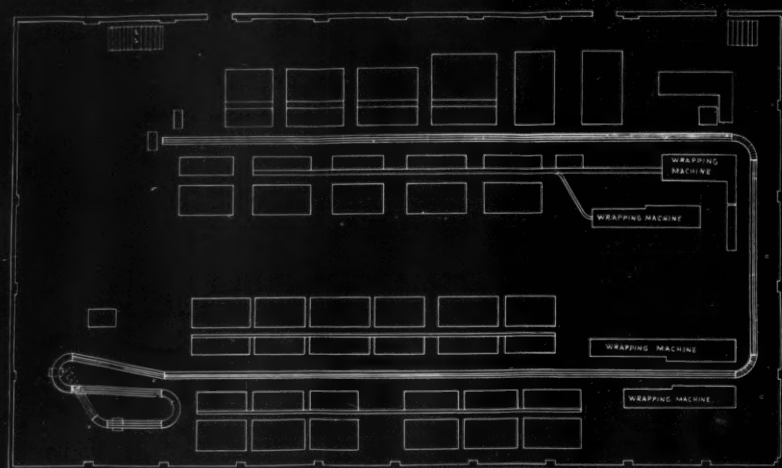
When filled to correct weight, the bag is placed back on the conveyor belt where it passes on to another girl who forms the gusset in the top of the bag ready for closing. After the gusset is formed, she inserts the bag into a pair of folders mounted above the conveyor belt. The gussets are held in shape as the bag passes along to the next operation of closing. (Continued on page 90)

6. The macaroni stick packaging set-up utilizes cleverly designed wood fixtures, plus scales equipped with special pans to facilitate handling of stick goods. 7. Close-up shows special attachment on scale. The stick goods are placed on the cellophane in the depression in this attachment. The cut-away portions facilitate finger grouping. 8. Blueprint shows layout of table and location of operators.





Upper diagram shows layout of plant when hand wrapping was employed. Note crowding which produced materials handling difficulties. The same converting room is shown in the lower diagram with all machines set in four straight production lines feeding to automatic wrappers. Hand wrapping is still possible, on special orders, at any machine in the production line.



Wrapping rolled paper automatically

In the application of machine wrapping to various types of merchandise, manufacturers of wrapping equipment have been faced with a legion of problems. Rectangular products presented the fewest difficulties. Products of cylindrical and irregular shape, but with contents of a firm nature, were next in line. The irregular shaped product naturally provided the real test for the packaging engineer, particularly so when the contents of this irregular package were of a soft or spongy nature.

Paper products generally come into this class and offer further complications through the desire of the manufacturer to preserve the bulk of the converted paper and to keep unwrinkled the texture and embossed

or printed design embodied in the product. The toilet paper roll is an outstanding example of this requirement. As originally produced, it was a tightly wound roll of perforated, machine glazed paper put up with an ordinary paper band. Demand for a better product brought out a crepe paper, later a paper with an embossed pattern and finally a roll of cleansing or facial tissue paper in varied tints and even scented with various scents. A better product demanded a better package and the paper band around the outer circumference of the roll was changed to a full tissue paper, glassine or even a transparent cellulose wrap which was sealed to cover the entire roll. The irregular nature of the package and the desire to pre- (Continued on page 86)

You can't sell a pig in the poke

New type meat carton protects the product while permitting visibility

For some time, meat packers and provision suppliers have been taking increased advantage of the promotional possibilities and conveniences of unit packaging with cellulose transparent materials. The development of formulas especially adapted to greasy foods has accelerated this trend to the point where the transparent package of bacon, dried beef, scrapple, breakfast sausage or similar products has invaded grocery and dairy counters. Consumer demand for smaller, more convenient packages, the desire for branded merchandise of known or recognizable quality merchandise and the preference of both consumer and retailer for attractive packages have become substantially established in this particular field.

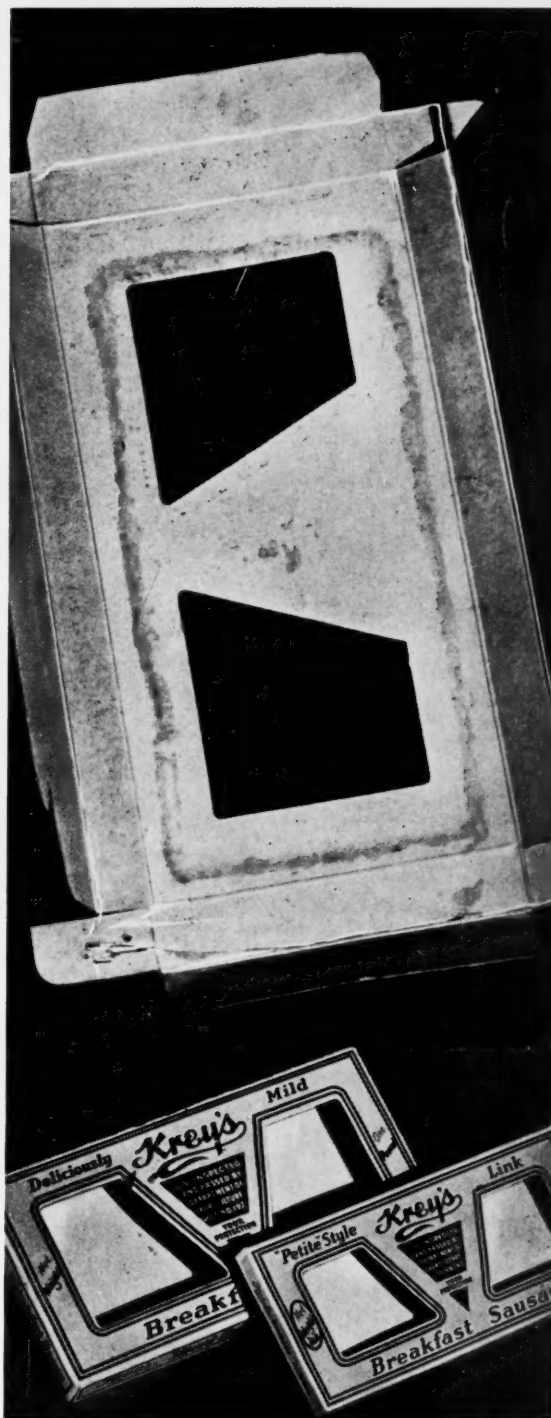
The Krey Packing Co., packers of pork and beef products, are now using another member of the transparent packaging family—a carton with transparent acetate windows for bacon and sausages in both 1/2-lb. and 1-lb. units.

The carton, which has two windows separated by the United States Government inspection imprint, is unique in that its transparent windows are not merely patches, but are part of a cellulose acetate lining cut so that it extends to protect the top, sides and end pieces of the carton from grease. The adhesive is applied near the carton crease so that the side and end pieces are free. The cellulose acetate liner prevents the meat from touching the carton at any point, thus protecting the meat and preserving the attractive appearance of the package. The meat itself is placed on heavy waxed paper and is easily slipped into the carton as a unit.

One of the principal selling points of the carton with its transparent window is that it gives full visibility to the appetizing contents. The consumer can quickly see what she is purchasing. In addition to offering visibility, the carton has durability and may be utilized for the storage of unused portions of bacon and sausage.

The cartons are attractively printed in red, white and blue, the background color differing for bacon and sausage. The United States inspection imprint forms the major part of the design pattern. Side panels carry the product name so that no matter how stacked on shelves, the dealer can readily ascertain the type of product packaged within the carton.

Credit: Carton manufactured by the Gereke-Allen Carton Co. Transparent acetate sheeting supplied by the Celluloid Corp.



Above: This view of the interior of Krey's meat carton shows how the cellulose acetate lining is cut so that it extends to protect the top, sides and end pieces of the carton from grease. Adhesive is applied near the carton crease so that the side and end pieces are free. Below: The attractively printed cartons with transparent windows permit the consumer to quickly see the type of product she is purchasing. Note the prominent position of the United States inspection imprint.



1. Above: To the extreme left may be seen the label used by Feigenspan prior to redesign. The three sketches following show gradual changes introduced by designer D'Addario. At the right are sketches of the usual vertical type of label as contrasted with the oval horizontal type. Note the increased space for imprinting the product name in a more legible manner. Below: In the center is the beer label as it was finally adopted. The four renderings shown to the right and left of the center package show additional steps in arriving at the final label execution.

Functional labels for Feigenspan

Christian Feigenspan Brewing Co. has its beer labels redesigned, adopting a new type of label for increased legibility and beauty

A distinctive family of labels, embodying many new ideas in beverage packaging, is now being introduced to the public by the Christian Feigenspan Brewing Co. When the company approached the problem of redesigning their labels, they called upon designer Thomas D'Addario who makes use, for what is believed to be the first time in this particular field, of the oval horizontal label with a bulls-eye rather than the vertical type.

This new type of functional label was believed most practical because it was felt that the labels being currently utilized were too narrow and carried too much decorative design and lettering to be read with

ease, placed as they were on a convex plane (on a round bottle). For that reason, an oval horizontal label was selected, since this shape provided ample space for the imprinting of the product name, trade mark and company name, as well as essential data required on beer labels. Designer D'Addario sought to produce labels which would not only be legible and attractive but which would be distinctive enough to be clearly recognized as individual members of the Feigenspan family.

Shown on these pages are some of the renderings executed before the desired effect was obtained. In Fig. 1 may be seen some of the steps taken before the

final solution to the problem was obtained. At the extreme left is the company's old label as used on beer bottles. Each of the sketches following illustrate improvements in layout and general organization of necessary inscriptions on the label. At the extreme right, it may be readily seen how legibility is achieved through the use of an oval horizontal label instead of the vertical variety.

In addition to these sketches, more than a score of label renderings were made and placed on actual bottles in order to better consider the size of the label in relation to the bottle, the organization of printed matter and color combinations. A further study of Fig. 1 will show the trial labels as contrasted with the label which was finally selected. The package in the center shows the finished beer label. The others show some of the sketches that led up to the final choice.

The new oval label spotlights the P.O.N. trade mark in a red bulls-eye. The product name is clearly visible. Legal lettering—data concerning contents, company address, tax statement, etc.—is on a band which is designed to be both useful and decorative. The result makes for high visibility, yet preserves a pleasing effect.

After label sketches were approved, Mr. D'Addario made the finished drawings and supervised the printing of labels with regard to color matching, plates, dies,

weight and type of paper, finish, etc. Then he went a step further. To be sure that the labels were placed exactly where he wanted them on the bottle, he furnished Feigenspan's production department with a set of blue-prints, showing different types of bottles with labels marked with regard to exact position on the bottles.

For the different Feigenspan beverage products, different colors are used, each color closely complementing the other. For the ale packages, the new colors are two shades of green, gold and black, with the bulls-eye highlighted in bright red. Light beer packages make use of labels in cream, brown and gold with red bulls-eye, while dark beer is identified by tan, garnet and cream, with porter beer using labels executed in black, light tan, red and gold. The larger size bottles use a specially designed neckband as well as a body label, the neckband carrying out the harmonious color scheme.

The closures for the beer and ale products are executed in colors harmonizing with the labels. The old crowns merely had the company's trade mark without any other copy. It was found desirable, when redesigning, to retain the trade mark, but to add the name of the brewer and identify the contents such as "light beer," "XXX porter," etc. This is particularly desirable when only the tops of the bottles are visible

2. Here are the old containers used for amber ale. Note the cluttered appearance of label design, substantially decreasing legibility. Each size of container required a different size of label, necessitating the use of three separate dies.

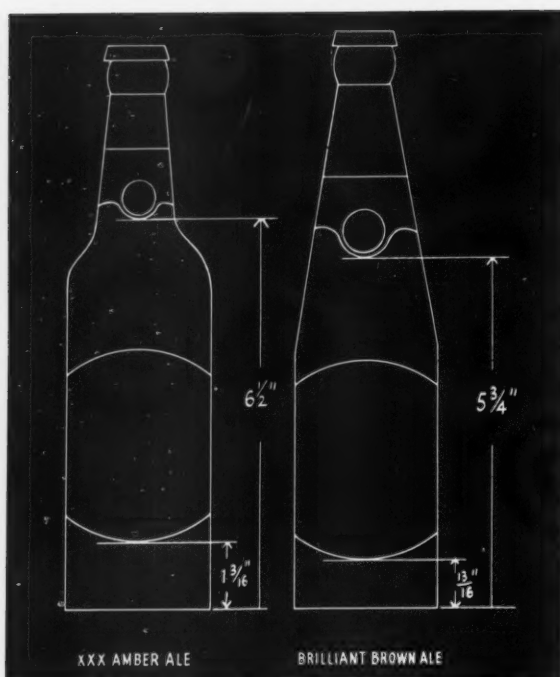
3. Here are the new containers for amber ale. Note how the product name may be read with ease as a result of the new oval shape of the label. Note too how clearly the P.O.N. trade mark stands out in its bulls-eye position. Caps and neck bands harmonize, the caps bearing the company name, the trade mark and identity of contents. Instead of the three dies formerly utilized, only two dies are required for the body labels. Despite the optical illusion, the same body label is used for both the steinie bottle at the extreme right and the bottle in the center of the illustration.

2



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such as in water coolers or when looking down into a beverage case.

The family of beers, as they finally appear on dealers' shelves, present a harmonious picture. Light beer, dark beer and XXX porter use differently combined color combinations, but similar label and cap designs. Brilliant brown and brown stout—the more expensive products in the line—use foil labels, with a similar design pattern. These latter products likewise make use of foil capsules over the regular bottle cap.

Advantages achieved as a result of redesign are many. Not only has the company achieved containers which are neater, cleaner and more modern, but they have also achieved increased legibility for their products. Further, the old body labels required three dies in order to produce labels in three sizes. The new label series require only two dies, since the same size label may be used on both the steinie and export type of bottles.

Credit: Bottles by the Owens-Illinois Glass Co. Paper labels by the Consolidated Lithograph Co. Caps by the Bond Manufacturing Co. Foil capsules by the Aluminum Co. of America. Foil labels by Reynolds Metals Co., Inc.



4. A blueprint was made showing different types of bottles with labels marked with regard to exact position on the bottles. Thus the positioning of the label was properly made to assure a neat and harmonious presentation when the bottles are grouped together on dealers' shelves or on display. 5. In this group may be seen each of the members in the Feigenspan family of beer products. Note the family resemblance and striking display effects possible as a result of similarity of label design with attractive, complementing color combinations.

Johnny-on-the-spot

is the appropriate name for a new fabric cleaner, so packaged as to be ready for quick and convenient use

That which is new seldom fails to intrigue. Add to novelty both durability and utility and one attains a continuity of interest that is indeed favorable to success. Such a recipe or plan was followed by the Standard Oil Co. of Ohio when they decided to introduce a new fabric cleaner. The company realized that certain conditions, which relate specifically to packaging, must be complied with if successful sales were to be attained. Thus the company has adopted a package for its fabric cleaner—known as Johnny-On-The-Spot—which provides the consumer with a unit which is convenient to carry, pack in traveling cases or store in the home cabinet, as well as a unit which is easy to apply to the material to be cleaned.

The cleaning fluid in its convenient package offers a number of advantages: The package cannot soil the hands in any way and the closure applicator utilized makes it impossible to waste or spill any of the contents. The fluid is contained in a glass bottle topped by a new type of applicator. This applicator, known as the Vacutop, uses the vacuum principle of the fountain pen to initiate control of the liquid. An intricate system of flow holes, baffle plates, felt pads and mohair top further regulates the quantity of liquid available to the user. Used as an applicator, the consumer merely removes the outside slip cover, turns the container upside down and applies the mohair top to the surface to be treated. Automatic control of the liquid keeps the applicator constantly moist in the exact degree necessary for most efficient use.

A non-perforated liner is utilized, during shipment, to further make the package completely leak-proof. The slip cover, made of metal finished in red, goes over the mohair top to protect it from dirt and dust.

The Vacutop device is ingeniously constructed. The applicator surface is made of pile fabrics, varying in closeness of weave and length of pile. Felt filter pads and feeders, varying in thickness, density and percentage of wool and cotton, are below the mohair top. Beneath this is found perforated metal shells, varying in number and size of perforations. Under the metal shells is a hollow compartment or reservoir and beneath the reservoir, a perforated metal baffle with holes vary-

ing in size. Next is a perforated felt-and-foil sealing liner and then the non-perforated shipping liner. At the base is found the threaded metal closure which screws onto the top of the bottle.

This type of applicator is a thoroughly practical package top for any liquid which is ordinarily applied with a rag or the hand, as well as for products which are to be disseminated by evaporation such as perfumes, aromatics, etc. It eliminates all possibility of waste and mess and makes the product far easier to use.

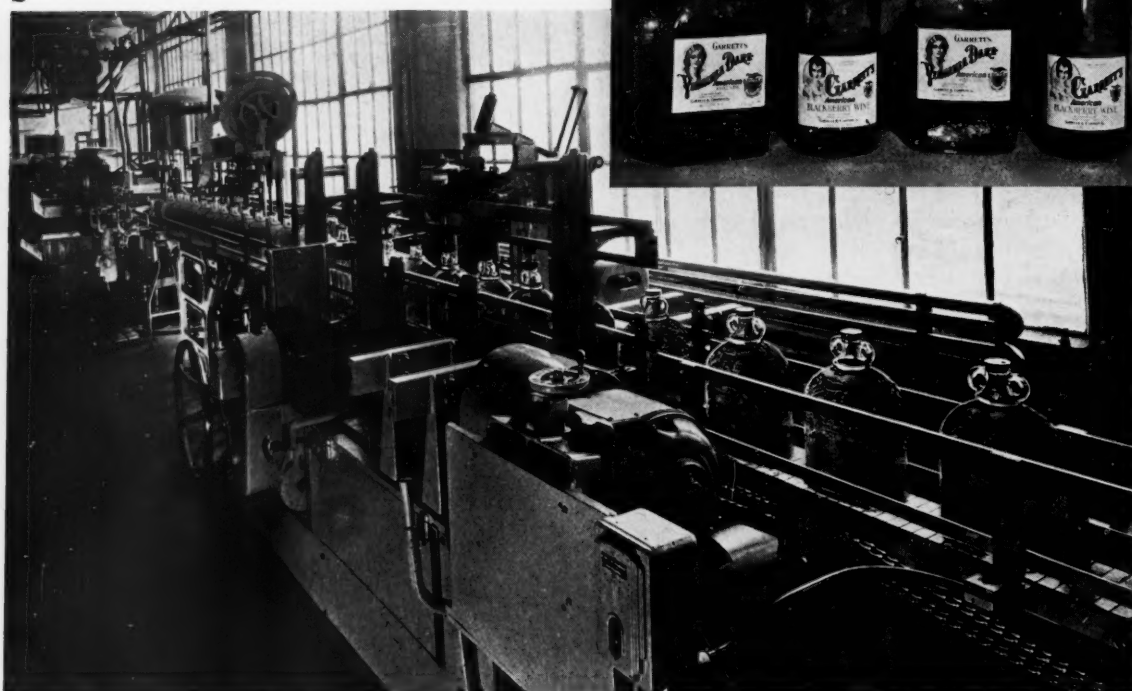
Credit: Vacutop by Double Duty Products, Inc. Bottle by Brockway Glass Co., Inc.



Johnny-On-The-Spot fabric cleaner reaches the market in a convenient sized glass container topped by a handy applicator, known as the Vacutop. The applicator may be easily unscrewed and is protected by a metal slip cover. The product name and trade mark is colorfully presented on a foil label in a red and blue color combination.

1. The four sizes of 1/2-gal. and 1-gal. containers packed on the new line here shown. Note the widely varying dimensions. 2. A general view of the new line with the labeler in the foreground. The capper, filler and bottle washer are toward the rear in that order.

2



Automatic handling of large bottles

Garrett & Co. gain 50 per cent capacity increase through introduction of redesigned highly adjusted 1-gal. and 1/2-gal. filling and labeling line

The name Virginia Dare is well known to most Americans as one of the most familiar of native wine types. The company behind the name is, perhaps, less well known to the general public, but in its own field it has long enjoyed a high reputation for its progressive attitude toward production and merchandising efforts.

This attitude has recently found expression in the enlargement and modernization of the company's Brooklyn winery where careful analysis of the problems at hand and intensive engineering research have provided a 50 per cent increase in production capacity and a 100 per cent increase in warehouse space, with no increase and redesign in the bottling room space. This increase in plant facilities has given the company improved working conditions, better light and venti-

lation and a production line (supplementing two lines installed at an earlier date) which is unique in a number of respects.

While the average bottler feels that quart containers present packaging headaches enough, Garrett & Co. was confronted with the problem of handling four types and shapes of containers in 1/2-gal., 1-gal. sizes and in quantities that made automatic production a prime essential. On the new line, these containers pass through the automatic equipment at a rate of as high as 240 cases per hour, moving on a conveyor system conceived and designed by Garrett's own production engineers and supplemented by the most modern handling equipment.

The problem of handling a large volume of these large size containers was found actually to be a series

of problems, beginning with the moment that the bottles arrive at the plant in re-shipping containers. All packaging materials—bottles, closures, labels, etc.—now enter the plant, located in Brooklyn's Bush Terminal development, via elevators which take them directly to the third floor storage room. From this room, an overhead belt and roller conveyor extends to the packaging production room likewise located on the third floor.

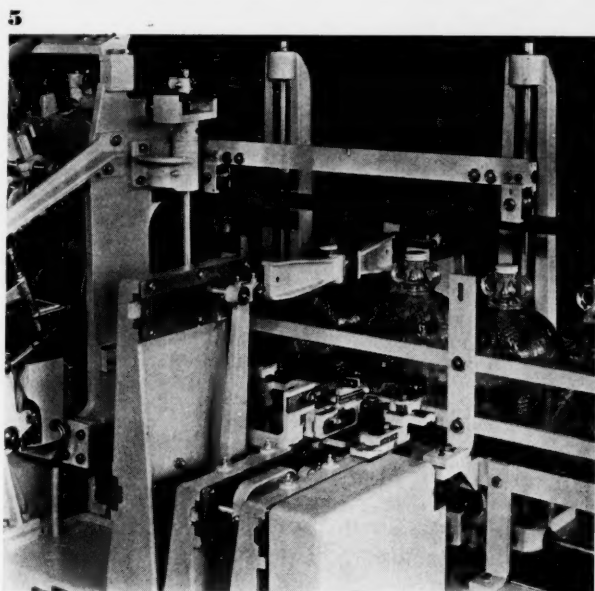
Bottles reach the automatic packaging line at the washing machine end, being placed in to the washer in inverted position by hand and being removed—again by hand—for placement upon the filling machine feed conveyor. From here on, movement is automatic through the 10-head rotary filler, past a single-head capper and an automatic straight line labeler to the re-cartoning stage. As bottles leave the labeler, and without interruption of their progress on the conveyor line, an operator places a secondary closure over the metal screw cap. The containers then continue, via the same conveyor, to the re-cartoning point. Here four 1-gal. bottles or six $\frac{1}{2}$ -gal. bottles are loaded into each corrugated case which passes through an automatic case sealer and thence, by conveyor and chute, to the second floor shipping department where the cases are imprinted with designating and identifying symbols and either held in storage or passed immediately by a



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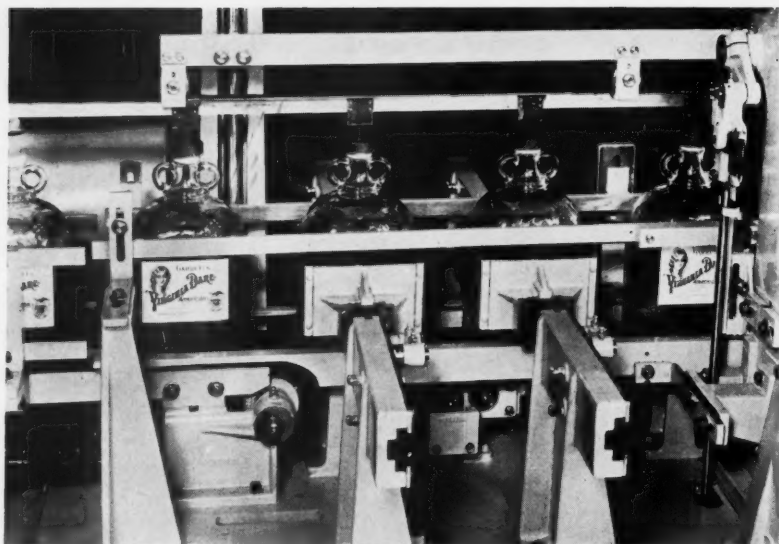


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3. A 10-head rotary filler is utilized, the conveyor guides being adjusted to properly position the 1-gal. bottles for later labeling at the automatic straight line labeler. 4. The use of a single-head capper facilitates changeover from one size bottle to another. Two sizes of closures are utilized on the four containers. 5. Close-up view of the feed mechanism on the straightaway automatic labeler positioning the bottles before labels are applied. At extreme left may be seen the automatic dating device which dates the underside of each label. Overhead bottle grips are used on the labeler to accurately position the bottles.



6. Close-up view of labeling process, showing two wiper stations. Note how securely and accurately the bottles are positioned by the overhead bottle grips. **7.** View of discharge end of the bottle filling line. Automatic case sealers are used, with roller conveyors carrying the re-cased product directly to either the storage warehouse or to the loading platform for prompt shipment, as desired.



further conveyor and chute to portable conveyors on the loading platform which bring the containers directly into shipping trucks.

Two features of the line are especially notable. First, the adaptability of the setup which permits the packaging of four different types of containers with a changeover time which, in practice, has proved not to exceed 18 minutes. This includes adjustment of between machine conveyors and of the washer, filler, capper, labeler and case sealer. Secondly, and representing the solution of an extended series of problems, is the ability of the line to handle large, bulky bottles automatically and accurately, without banging or jarring, at high speed and with an unusually low breakage record. The labeler, for instance, is equipped with an ingenious feed mechanism which facilitates the proper spacing and positioning of the containers and with an automatic dating device which may be used to date either the underside of the label or the outer visible portion as desired. Overhead bottle grips are used on the labeler to accurately and securely position the bottles at the various labeling stations.

The relatively high rate of production which has been maintained since the introduction of this new line is, of course, made possible by a combination of several factors: The reduction of breakage and the straight line handling contribute greatly to the speedy movement of the product from stage to stage in the line. The adjustability of the equipment for changeover purposes makes possible a rapid adjustment of products in the line, without withdrawal demands made upon the warehouse on the floor below. This permits a minimizing of the volume of package goods which must be held in storage as a reservoir for withdrawal on each of the four sizes of package, since a shift from one package to another does not represent the expense and trouble of an extended shutdown for adjustment to the new container. Hence runs on any single container can be relatively shorter than would otherwise be the case. And, in point of fact, when occasion has demanded it, changeovers occur during the working day with different sizes being produced on the same line at different times dur-

(Continued on page 94)

Full telescoping set-up boxes, similar to the standard Woodbury facial powder boxes, are utilized. An ingenious die-cut construction displays the Bateek perfume bottle, but prevents its pilferage.



Premium in a niche

The Andrew Jergens Co. offers a combination package of powder and perfume, publicizing the offer via displays, radio and magazines

On the theory that perfume is a natural team mate for powder, the Andrew Jergens Co. has recently started to market a package presenting a combination offer of Woodbury facial powder with 1-dram and 1/2-dram bottles of perfume as a free premium inducement. Publicized over the company's coast-to-coast network broadcasts and in trade and consumer magazines, the offer depends largely for its effectiveness upon the unique package structure which prevents dealer separation of the premium from the product and facilitates handling of the merchandise both in shipment and in the store.

Set-up boxes, similar in design to those utilized in the standard Woodbury powder packages, have been adopted—a square box for the 25-cent size and an

octagonal box for the 50-cent size, both with full telescopic lids. These lids, however, have been made somewhat deeper and the added space is utilized to form a niche in the top of the container into which the perfume bottle is firmly locked.

Inserted from the inside of the box lid, the bottle is held in place by a cardboard diaphragm which separates it from the powder portion of the package. The bottle is, of course, completely visible and may, in fact, be touched as it protrudes slightly above the top of the powder box.

To tie in with radio and magazine advertising, two displays have been created to present the offer to the public. Both utilize slotted constructions, permitting the insertion of actual packages of the product.



Counter displays present the actual combination packages and the speediest and most convincing information of what the deal is all about.

Packaging Pageant



1 Chase & Hale, Inc., sponsor Lady Louise Bath Foam in easily gripped bottles of oval cross section with plastic closures. The same front label is utilized on both the small and large sizes as is a back label, in booklet form, designed to give full instructions for use. Bottles by Carr-Lowrey Glass Co. Labels by McGill Warner Co.

2 The Golden Bear Cookie Co. sponsors these colorfully decorated 3-lb cookie tins designed for household use. Attractive lithography and—in two instances at least—the complete absence of advertising wording are calculated to win sales among householders who desire a package which may be placed directly on the coffee table. Containers manufactured and lithographed by Geo. V. Clark Co., Inc.

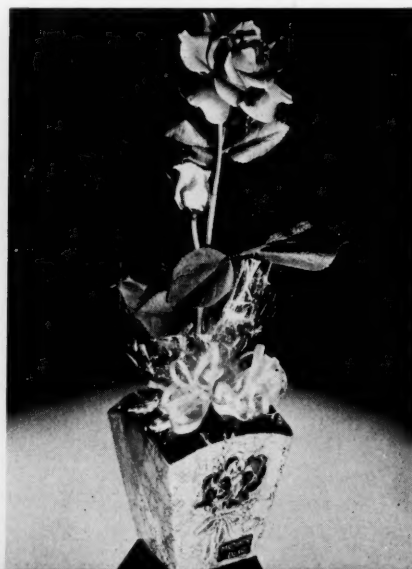
3 Modern roadside stands no longer grind their own hamburgers. Hamburg steak now reaches the market in packaged form with a container designed to provide full protection for the perishable product. The bag is made of cotton, lined with a specially coated vegetable parchment. The parchment has a high wet strength and the coating on the parchment paper makes it moisture-vapor-proof. Thus the steak is kept fresh and free from contamination. Bag by W. H. Divine Manufacturing Co. Parchment paper by Patterson Parchment Paper Co. Coated by the Riegel Paper Corp.

4 Designed especially for institutional use, this new package of the Penn Tobacco Co. has been reported to be receiving most satisfactory acceptance in its own special markets where the old-fashioned nature of the design has a special appeal. Designed and created by the Eureka Specialty Printing Co.

5 An Easter and Mother's Day novelty which has won unusual sales volume for the Hoffman Candy Co. is this flower pot box complete with its artificial rose bush. Instead of soil, the box contains an assortment of chocolate-covered candies held in position by a printed transparent cellulose overwrap—the printed design being varied to suit the season. The set-up "flower pot" box is the product of C. W. Hering.

6 Patent lip vials with cork closures are utilized by the C. F. Sauer Co. for its food colors. Five vials are packed in a window carton to provide a compact and colorful container. The lip formation of the vial facilitates the dispensing and accurate measurement of the product. Vials by the Kimble Glass Co.

7 Nested one within the other, this container carries four serving trays made by the Haskelite Manufacturing Corp. To aid dealers in creating interest in the product on display, the package utilizes an actual photograph of one of the trays in use, providing the consumer with a clear impression of the size and structure of the tray as well as of its fine woodgrain surface and high finish. The photographic illustration stands out against a red background with white lettering on top and carton edges. Carton designed and manufactured by the Container Corp. of America.





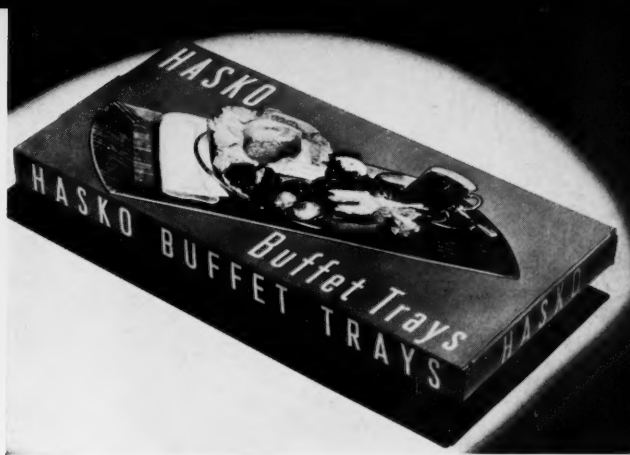
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8 For its Milk of Trinesium, Abbott Laboratories have recently adopted these 2-oz. and 12-oz. blue glass bottles with plastic screw caps. The small bottle is designed for sample distribution. The large container—for store sale—is overwrapped with cellophane. Bottles supplied by the Maryland Glass Corp.

9 Of most unusual design is the new container developed for Schnefel Bros. Corporation's La Cross nail polish remover. While this product required a larger bottle than that utilized for nail polish, it was desired that the appearance of the container be basically similar. The problem was solved by a "double" construction which resembles a merger of two of the smaller containers. The bottle, however, has but a single cavity and a single neck opening. The band type label rests upon a flat glass surface which bridges the gap formed by the central vertical indentation in the glass. The inner walls of the carton tabs are utilized for cross advertising of other La Cross products. Bottles by Carr-Lowrey Glass Co. and Owens-Illinois Glass Co. Plastic closures by Mack Molding Co. Labels by Barton Press. Cartons by Disbrow Manufacturing Co.

10 From Australia comes this family of set-up boxes, utilized by the Pyramid Dental Mfg. Co., Ltd., to carry a wide range of dental supplies. A silver pyroxylin coated paper is utilized, printed in two shades of green, with the design calculated to afford general family relationship despite wide differences in box proportions throughout the line. Boxes manufactured by Watson, Ferguson & Co., Ltd. Pyroxylin coated paper by The Plastic Coating Corp. Distributed in Australia by B. J. Ball, Ltd.

11 The Owens Staple-Tied Brush Co. utilizes this ingeniously formed folding carton to present its new improved Exton hairbrush. The cartonboard is so cut that extensions of the back and side flaps line the inner chamber to provide a brilliant white background for the light blue brush handle. The carton is printed in one color in a shade matching that of the brush handle with all lettering reversed to appear in white. The brush is held in the cut-away pocket by an overwrap of cellophane. Carton by the Richardson Taylor-Globe Corp. Cellophane by E. I. du Pont de Nemours & Co., Inc.



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11

The Storage of Packaging Materials

a study of some of the problems confronting packagers,
conducted by the Institute of Package Research

Almost every packager has been faced at one time or another with the problems raised by deterioration of packaging materials or supplies while they were awaiting utilization in the packaging plant. Such deterioration is, in almost every instance, a form of unnecessary waste which might be eliminated if simple precautions regarding conditions of storage were observed.

Many of these precautions are known to production managers, for they have learned them—in many instances—the hard way, through sad and bitter experience. Yet, today, even the most experienced production manager will find himself confronted with newer materials requiring special consideration in handling and storage.

Thus Modern Packaging presents this study by the Institute of Package Research as a guide for all packagers. This study is by no means all-inclusive. We present here, in fact, only the basic preliminary data which should be at the command of every production manager. Further data will be published from time to time and we would be particularly interested in hearing from production managers and package users regarding their own experiences with storage problems and their own solutions for these problems.

* * *

Storage of Transparent Sheetings

Cellophane sheeting materials are supplied by their manufacturers with a predetermined moisture content. They are capable of absorbing moisture. They are capable of drying out. Therefore, they should not be stored or handled under extreme conditions of heat, cold, moisture or dryness. The optimum temperature for storage is 70 deg. F. A 50 per cent relative humidity is most desirable.

Purchasers of converted sheets, bags and other forms of cellophane have, on occasion, experienced difficulties with shipments received during or immediately after extreme cold spells. Such shipments, having been subjected to transit during sub-freezing weather, should be allowed at least 24 to 48 hours to reach room temperature before being used.

Unconverted sheet or roll stock is usually securely packed to be in prime condition for the maximum length of time. Original packages should not be opened until ready for use. When entire packages or rolls are not to be consumed immediately after opening, the unused portion of the packages should be re-wrapped in their original wrappers for over night or longer storage.

Rolls should be stored in their original shipping containers until ready for use. Most manufacturers recommend hanging the rolls horizontally. Sheets should be stacked, but such stacks should never be too high.

One manufacturer recommends ten packages of 1000 sheets each as maximum stack height and advises smaller stacks in humid weather. Adherence to this particular specification will prevent sheets from adhering to each other.

The moisture-proof types of cellophane are not as readily affected by climatic changes as are non-moisture-proof varieties. Nevertheless, the precautions described above apply to moisture-proof varieties though, perhaps, to a lesser degree. One supplier recommends against the purchase and storage of more than a 60-day supply of material, as fresh stock can be obtained promptly.

Acetate Sheetings

Acetate sheetings, supplied in rolls, should be stored hung horizontally in suitable wraps at a room temperature of 70 deg. F. and 50 per cent relative humidity, out of direct sunlight. The temperature should in no instance exceed 90 deg. and 55 per cent relative humidity. Low temperature and humidity have no serious deleterious effect, but rolls may require conditioning before fabricating if stored at temperatures at the freezing point or below.

Sheets should be stored in their original wraps and laid flat on smooth shelves under atmospheric conditions similar to those described for rolls above. They should not be stacked in piles more than 12 in. high.

MEET THE BURT FAMILY



"Billie" Set-Up He's the oldest of the Burt kids—and like his granddaddy the first Burt box back in '85—a livewire, natural salesman. Handsomest young fellow in town—as everyone can see at a glance. And that husky frame is carrying him a long way.

"Janie" Folding . . . She's next—and a mighty important and fast growing division of the Burt family! She's beautiful—attracts all eyes wherever she is—in the grocery store, bakery, department store—on Main Street or Fifth Avenue!

"Johnny" Display . . A born actor! "Display" is the middle name of this Burt boy and does he live up to it! Just naturally sits himself in the middle of any counter, window or showcase! Full of clever ideas, too.

"Clare" Transparent . Baby of the family—and prettiest of them all! So lovely that everything she holds sparkles in her presence.

BURT offers you a complete line of boxes and cartons plus keen designing brains and production economy. Consult us today.

F. N. Burt Company, Inc.

500-540 SENECA STREET, BUFFALO, N. Y.

NEW YORK CITY
630 Fifth Avenue
Room 1461

CHICAGO
Room 2203
919 N. Michigan Ave.

MINNEAPOLIS
J. E. Moor
3329 Dupont Ave. South

PHILADELPHIA
A. B. Hebel
P. O. Box 6308
W. Market St. Sta.

CLEVELAND
W. G. Hazen
P. O. Box 2445
E. Cleveland, Ohio

LOS ANGELES
Louis Andrews
523 1/2 South Grand Ave.

NEW ENGLAND
A. B. Bacon
BOSTON
120 Boylston St.

CINCINNATI
221 Walnut Street
Telephone MAin 0367

SPRINGFIELD
P. O. Box 214
Highland Station

MEMPHIS
Frank D. Jackson
2150 Washington Ave.

CANADIAN DIVISION
Dominion Paper Box Co., Ltd.
469-483 King Street, West
Toronto 2, Canada

Rubber Derivative Sheetings

These materials are virtually unaffected by dryness or dampness and hence special temperatures or humidity precautions are not generally considered necessary. Conditions in the average packaging plant are within the wide range which is not detrimental to such rubber derivative materials.

Materials are, however, affected by strong sunlight and should be shielded from the ultra-violet rays of the sun either by storing in the dark or wrapping the rolls or bundles in opaque paper. Rolls should be stored on end, with the ends reversed every two or three months so that there is no tendency to inflex one end. No particular precautions as to circulation of air are required.

Ethyl Acetate Sheetings

Moisture absorption of these materials is low and volume change, under storage conditions, is therefore very small. The plasticizers of these materials are not moisture-soluble or volatile and do not bleed.

The foils usually employed for the manufacture of rigid fabricated or drawn shapes have a very high softening point and can therefore be subjected to temperatures—in storage—up to approximately 145 to 150 deg. F. Precaution should be taken to avoid extreme changes in temperature during processing such as multi-color printing, although the coefficient of thermal expansion is not excessive.

Foil which has been subjected to extremely dry conditions will, if brought into contact with humid air, expand about $\frac{1}{4}$ of 1 per cent (0.0025" per in.) but this expansion is not experienced under normal changes.

Companies Cooperating in This Study

Aluminum Co. of America
The Arabol Manufacturing Co.
Celluloid Corp.
Celluplastic Corp.
Chicago Printed String Co.
Louis Dejonge & Co.
The Dow Chemical Co.
General Printing Ink Corp.
The Goodyear Tire & Rubber Co., Inc.
Hercules Powder Co., Inc.
International Printing Ink, Division of Interchemical Corp.
Lusteroid Container Co., Inc.
The Marvellum Co.
The Menasha Products Co.
Monsanto Chemical Co.
National Adhesives Division of National Starch Products, Inc.
National Metal Edge Box Co.
Riegel Paper Corp.
Sylvania Industrial Corp.
Union Paste Co.
The United States Printing & Lithograph Co.
Williamson Adhesives, Inc.
Wyomissing Glazed Paper Co.

Adhesives

The term adhesives is a broad one covering a wide variety of materials of differing characteristics. Nonetheless, a number of general storage cautions can be applied almost without variation to most types of adhesive products.

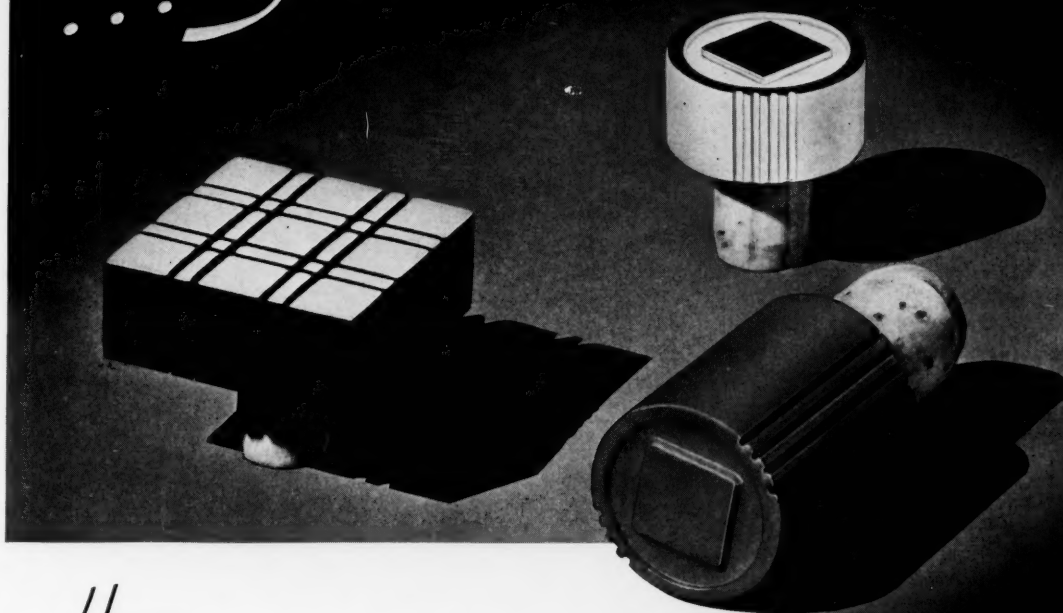
Aqueous and non-aqueous adhesives should be kept at moderate temperatures at all times—at room temperature in winter and in a cool place in summer. All adhesives should be stored, if possible, during the winter at normal temperature of about 70 deg. F. The viscosity of an adhesive is directly relative to its temperature. Thus, if the material is too cold, it will be very viscous and will possibly operate poorly on the machine on which it is used. Conversely, if the material is too warm, the viscosity is lowered to a point which again interferes with operation.

Prepared glues which have been subjected to excessive low temperatures may be restored to their normal consistency by placing the container in a warm location for a few days before using. If time does not permit this procedure, some manufacturers recommend filling a metal container with the glue and partially immersing the container in hot water. Consumers are warned against adding water to the glue until normal consistency has been restored; otherwise it is impossible to judge the correct amount of water to be added and the tendency is to add too much.

Aqueous adhesives where the containers have been opened in the customer's plant should be covered with a damp cloth at night, or the container sealed tightly so that evaporation of the water is minimized and the adhesive not allowed to crust over. This minimizes the necessity of throwing away adhesive that has hardened or crusted on the surface of the adhesive and the sides of the container. Some adhesives are shipped in special containers which must be closed tightly after portions of adhesive have been removed from the same so as not to allow the introduction of air, and likewise possible oxidation of the adhesive.

Manufacturers of the adhesives usually determine the type of container most suitable for the adhesive formula based on natural storage tests conducted experimentally in their plant. Non-aqueous or lacquer adhesives should be kept away from all flame, high temperatures, etc. These adhesives should be stocked the same as aqueous adhesives with normal conditions of temperature between 65–75 deg. F. so that the viscosity of the adhesive is about correct when a portion of the material is removed from the container and placed on the machine. All containers for non-aqueous adhesives should be closed tightly after adhesive is removed for use. The solvents in most of these types of adhesives are volatile and evaporation must be controlled as much as possible during storage so as not to have the material become viscous just because of solvent evaporation. Direct sunlight should not be allowed to play on the containers of non-aqueous adhesives because of the possible rise in temperature and expansion of the solvents which might burst the

Style-Up YOUR PACKAGE ... Step-Up YOUR PROFITS



*H*ERE'S how you can style-up your cork-finish bottles, and thus step-up your sales. Use trim, modern Armstrong's Embossed-Top Corks—now available in smart, new shapes and designs to give your package maximum eye-appeal.

Armstrong's Embossed-Top Corks are made of carefully selected, resilient corkwood, with cleverly designed and colored hardwood tops that harmonize with the smart modern lines of your glass containers. If de-

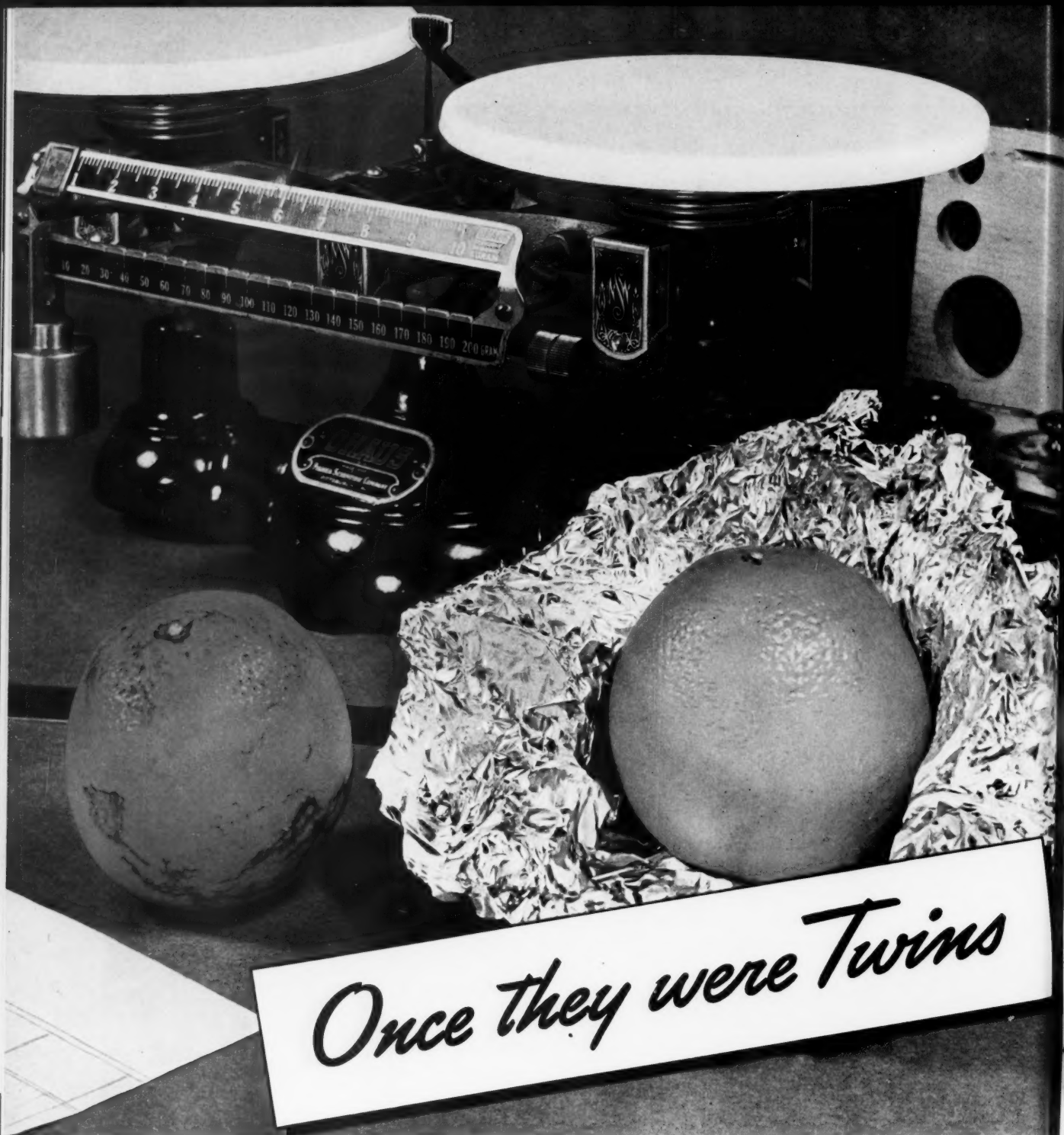
sired, you can even have your name or trade-mark colorfully reproduced on these tops to add instant product identification.

These quality closures also give the merchandise in cork-finish bottles dependable protection against leakage and evaporation, and they make the bottles easy to open and reseal. For full information and samples, write to Armstrong Cork Company, Glass and Closure Division, 916 Arch St., Lancaster, Pa.



FREE . . . Obtain a sample box of these new corks today! Try them in your bottles! Upon request, a box of these new, modern Embossed-Top Corks will be mailed free of charge to manufacturers of glass-packaged merchandise.

ARMSTRONG'S EMBOSSED-TOP CORKS



Once they were Twins



These oranges were the same size and weight the day they were picked in Florida. Then one was wrapped in Aluminum Foil and both were put in cold storage for three months. When removed, the unwrapped orange had lost 17 per cent in weight (moisture) while the foil-wrapped orange had lost but 1 per cent.

The full name is

ALCOA

TESTS ON ORANGES PROVE ALUMINUM FOIL BEST IN REDUCING MOISTURE LOSS

SEEKING the best means of preserving oranges in storage, the Agricultural Experiment Station of the University of Florida experimented with 21 different types of loose wrappers. Oranges and other citrus fruits were wrapped in each kind and kept in storage at various controlled temperatures for three to five months.

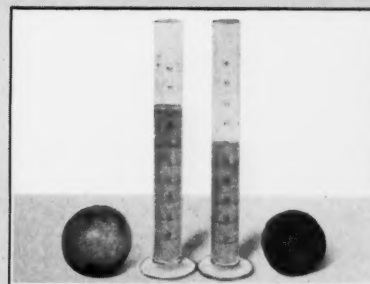
Of the materials tested, which included virtually all the types of wrappers used in the food industry, Aluminum Foil proved the most efficient. Oranges wrapped in Aluminum Foil lost less than half as much moisture as those in the next best wrapper.

These findings were commercially applied last year to lengthen the shipping season. Foil-wrapped Florida oranges were held in storage until market prices were favorable; then shipped and sold at premium prices in eastern cities.

If this impressive illustration of the superior moisture resistance of Aluminum Foil leads you to wonder whether you, too, can profitably use it to protect your product against loss (or gain) of moisture, find out by writing ALUMINUM COMPANY OF AMERICA, 2129 Gulf Building, Pittsburgh, Penna.



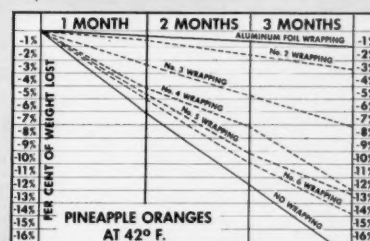
Purchasers of foil-wrapped oranges get a real buy, more than four extra "orangefuls" of juice in every twelve.



The University of Florida tests show that, after three months in storage, a size 200 foil-wrapped orange yields approximately 80 cc. of juice while an unwrapped orange yields around 59.5 cc. Thus a dozen wrapped in Aluminum Foil are the equivalent of 16 unwrapped oranges stored under identical conditions for three months.



Effectiveness of Aluminum Foil in preserving size, weight and juice is shown by these cross sections of Florida oranges that had been kept in storage three months. Left, an orange wrapped in Aluminum Foil. Right, an orange that had no wrapper.



Shows weight (moisture) loss of Florida oranges, wrapped in six different materials, during three months in storage at 42°F. Oranges wrapped in Aluminum Foil lost but 1 per cent, less than half as much as those in the next best wrapper. Tests were made by University of Florida.

ALUMINUM FOIL

container if too much pressure is developed within the container itself. Explosion will cause a fire hazard or possible fire itself.

After adhesive barrels or drums have been opened, certain precautions are indicated. It is advisable to keep the sides of the container scraped down to the level of the glue. If this is not done, the accumulations on the side of the barrel may cake or crust entirely apart from the metal. These hard crusts may fall into the glue and cause endless trouble and even damage costly machinery.

In the case of heavy pastes, an effective method is to keep the paste in the form of a mound in the center of the barrel, so that no accumulation or crust will form on the sides.

The tendency of glue or paste to become heavier in consistency due to evaporation of moisture may be prevented by covering the container with several layers of well-moistened burlap. Another manufacturer recommends having heavy thicknesses of felt on the underside of the barrel head covers, the felt being kept impregnated with water to prevent drying out of the paste. This is reported to be particularly desirable in the winter time when relative humidity is low. With heavy bodied adhesives, another manufacturer suggests covering the glue with a half-inch layer of water. A caution that applies to all adhesives is never to leave the container uncovered for any length of time as dirt or foreign substances may find their way into the adhesives and cause serious trouble at a later date.

Users of concentrated adhesives that require dilution of water are cautioned against adding water to the glue in the original container. It is far better to draw the required amount of adhesive for the day's run from the container and then to add water as required in a small receptacle. If the glue is used on a machine, users are cautioned against attempting dilution in the machine glue pot. Dilution should be carried on in a pail or other receptacle, mixing the water in thoroughly and then pouring the diluted glue mixture into the machine reservoir.

If diluted glue is left over at the end of the day, users are advised against returning it to the glue container. It is far preferable to be kept over night in a pail or other receptacle since it may contain dirt that was accidentally dropped into it or bacteria in the water to dilute it. Such conditions will have a tendency to deteriorate the entire keg or barrel of glue if the glue left over from the day's run is poured back into it.

Inks

Since ink is packed in cans or occasionally in tubes, both of which are airtight, the problem of storing is not particularly important. Obviously, they should not be kept below freezing temperatures or in a room that is excessively hot, but, generally speaking, the storage of ink in its original container is not much of a problem. Exposure to light, of course, is not a factor.

Ink should be kept enclosed in a can because if it is left exposed to air, it will liver, skin, etc. As a generalization, you might say ink should be kept airtight and exposed to air only when used and only great extremes of temperature would have much effect on it.

It is usually inadvisable to carry stocks of colored inks for greatly extended periods. Black inks, at least those of the ordinary linseed oil type, usually improve with age so that for periods of at least a year, they will be quite safe.

This is not true of many of the newer type inks containing synthetic vehicles. Many of these should not be stocked for more than a few months. Colors of this type should be ordered as they are required, since some of these special vehicles show tendencies of instabilities. The manufacturer can give data on such cases.

Wrapping and Box Covering Papers

Glazed and fancy decorated papers do not present extremely rigid storage requirements. In respect to temperature and humidity, the optimum is reported to be 75 deg. F. and 50 per cent. Maximum temperatures should not exceed 120 deg. F. The minimum should not drop below 40 deg. F. Humidity should not exceed 75 per cent nor fall below 15 per cent.

Packaging papers should be stored in dry rooms with shades drawn at the windows or other means adopted to keep out excessive light. Practically all coated and fancy papers have some tendency to fade under severe exposure to light even though the best non-fading dyes may have been utilized. Certain colors fade more easily than others and it is therefore a wise precaution to store papers in as dark a room as possible. One manufacturer recommends stacking on platforms at least 4 in. from the floor, both as a sanitary precaution and to avoid floor-obtained moisture. One manufacturer makes the following statement: "With the exception of paper containing deep embossings, all paper should be stored flat. Rolls of deep embossed papers should be kept in wrappers until ready for use. These rolls should be stacked on end."

Paper which is to be printed should be stored under similar conditions of humidity and temperature as the printing room, or, in the event that this is not possible, should stand in the printing room at least 48 hours before being used.

Glassines

Glassines should be kept in their original containers as long as possible before use, since these containers are designed to protect the material. Since glassines are affected by temperature and humidity in much the same way as are transparent cellulose materials, it is advised that they be stored at 70 deg. F. or as near to that as possible, with the relative humidity of from 50 per cent to 65 per cent.

Rolls should be handled in such a way as not to damage the edges or the ends. Sheets should be stacked either in very low piles of not (Continued on page 78)

YOU know
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THE HEEL

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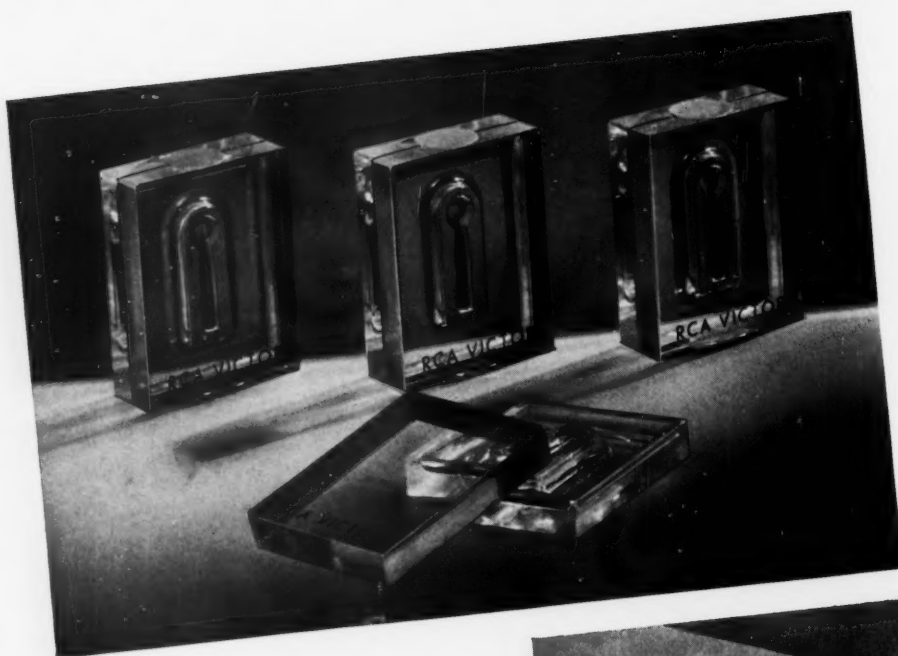
*You just know
she's Beautiful*



YOU know the product beneath the lid of a Heekin Lithographed Can must be good . . . because the color of the can . . . the design . . . the shape . . . tells the story of the product. Heekin metal lithography is outstanding in its quality . . . yet it costs no more than ordinary metal lithography. And, don't be afraid of figures . . . for, whether your can requirement is large or small, your order receives individual attention. From little acorns great oaks grow . . . maybe you are an oak in the making. May we talk it over?

THE HEEKIN CAN COMPANY, Cincinnati, O.

heekin cans
Lithographed
WITH HARMONIZED COLORS



1. A rectangular, transparent polystyrene container houses the new RCA Victor Long-Life phonograph needle. The mold has been designed so that the container enlarges the needle's point for close inspection. 2. A gross of Red Devil glass cutter wheels are packed in this molded phenolic container which prevents the oiled wheels from drying out.

Plastics for the miniature product

Two recent cases show "stage setting" possibilities of plastic packages



In packaging, the use of plastics has been firmly established. Everywhere one can see closures, applicators, molded boxes, display devices, etc. Of late, two concerns have turned to plastics for different reasons. One company wanted product protection, the other desired to package and display its product to best advantage. Both organizations found what they wanted in different plastic materials.

When the R.C.A. Manufacturing Co., Inc. perfected its new Long-Life phonograph needle after several years' research, the company desired to present this precision-built product in a manner that would permit the consumer to readily see the product while, at the same time, protecting the needle from handling, dust and dirt. The problem was solved by adopting a unique package for the product—a container molded of crystal-clear polystyrene. The package is designed not only to protect the product, but, being transparent, it permits unlimited display and promotion possibilities. Because of the clear magnifying properties of polystyrene, the mold has been designed so that the container enlarges the needle's point for close inspection.

The needle is set in a niche-like recess in the center

of the transparent, rectangular container. The only words appearing on the plastic closure itself are "RCA Victor" in red. Simple instructions for opening the container are on a special envelope in which the consumer receives the package. The unit is completely tamper-proof, for once the seal is broken it cannot be resealed again. The container, however, may be used in the home as a permanent storage box.

Landon P. Smith, Inc. did not desire display for its product, but, rather, sought product protection. The company's Red Devil glass cutter wheels had previously been packaged in paper boxes, but there was a tendency for these oiled wheels to dry out. It was found that a molded phenolic box would be admirably suited for this product because phenolic materials contain a combination of properties that offer chemical resistance, heat resistance and durability. Therefore the company adopted a molded box with a red lid and a black base. The snug box holds a gross of wheels and has been reported to prevent the product from drying out.

Credit: Polystyrene and phenolic material supplied by the Bakelite Corp. Landon P. Smith, Inc. container molded by the Mack Molding Co., Inc.

In carton
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Ridgelo CLAY COATED **MAKES THE MOST OF MODERN METHODS**

In carton design—Ridgelo clay coated is smooth...uniform enough to reproduce clear, fine screen halftones, clean Ben Days...brilliant solids. It makes every design look its best!

In folding box printing—Ridgelo clay coated gives sharpness to details...brightness to gloss inks...minimum varnish discoloration, maximum luster. It does all this with less ink, often at a considerable saving.

In specific qualities—The makers of Ridgelo clay

coated now offer roll laminating combined boards with unusual finishes, high strength, super-folding ability, grease and moisture resistance. Embossings and brush (high-in-shine) finishes are also available.

You may need this type of service in solving your packaging problems... It means the best results for the artist and the converter. For the functional value and good appearance of your package... use a Ridgelo clay coated service.

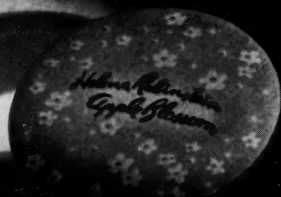
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Representatives: E. C. Collins, Baltimore • Bradner Smith and Company and Mac Sim Bar Paper Company, Chicago
H. B. Royce, • Detroit • Zellerbach Paper Company, Pacific Coast • A. E. Kellogg, St. Louis

Eminent for beauty

Just as beauty is enhanced by the superlative quality of Helena Rubinstein cosmetics, lithography by Addison is distinguished by its quality craftsmanship.



DISPLAY CARDS — CARTONS — LABELS — WRAPS — COUNTER DISPLAYS

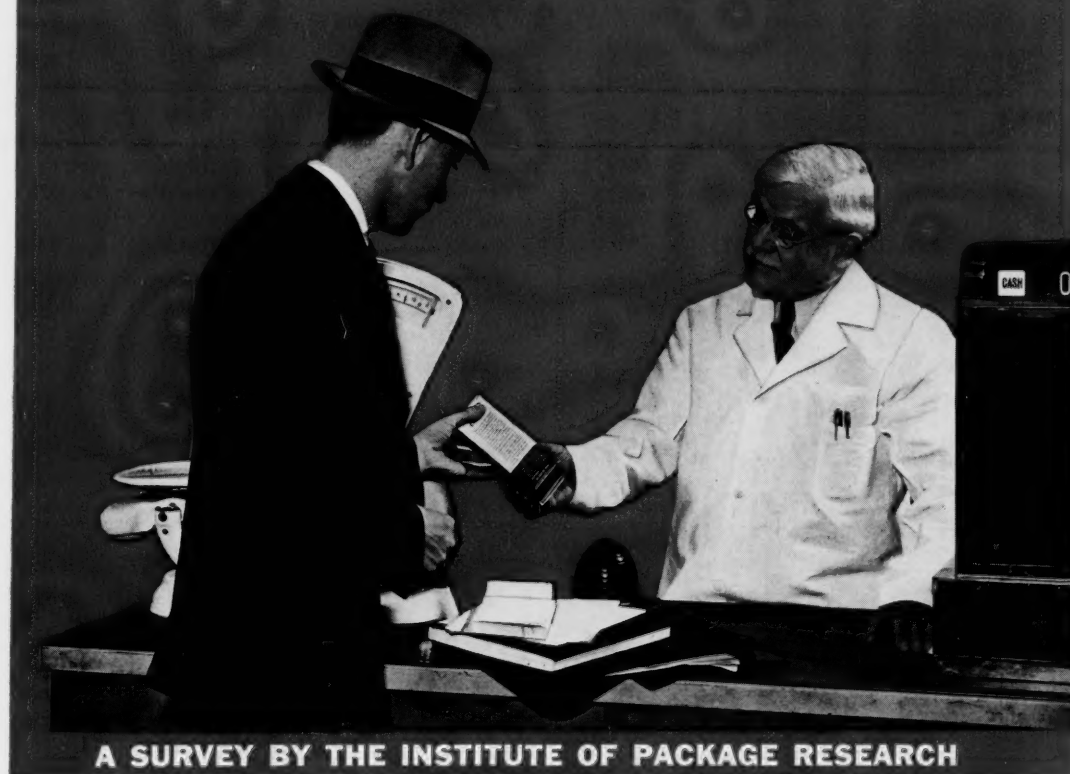
ADDISON LITHOGRAPHING COMPANY

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MODERN DISPLAY



A SURVEY BY THE INSTITUTE OF PACKAGE RESEARCH

What the grocer wants in display

Part 2: A study of dealer preferences as expressed by actual usage of displays in the New York area

In the first part of this survey, we studied the actual usage of displays in grocery stores throughout the New York metropolitan area. Such a census of displays, actually installed in stores, was felt to be important because it eliminated all factors of dealer opinion and took cognizance only of the tangible and demonstrable factor that certain displays or certain types of displays were being used in certain ways.

Nonetheless, it is not proposed to ignore the grocers' opinions. The grocer is in a position to exercise the most effective type of censorship in expressing his opinions. Whether these opinions, in any instance, are correct or misguided is of no importance, for, right or wrong, a dealer's prejudice for or against any type of display can decide whether or not that unit will win a position on that grocer's shelves, counters or windows.

Grocers' Reasons for Using Displays

Retaining the breakdown of stores by the class of neighborhood served (as in the first part of this survey), we have sought to tabulate the grocers' reasons for using displays as expressed, without coaching, by the dealer. Chart 7, therefore, indicates the reasons which the dealer thinks are governing his selection of displays. Whether or not these reasons actually operate in every case (or even in a large percentage of cases) we cannot say. Certain exceptions may be observed in virtually every store. Yet, the important thing is that these are the reasons which grocers think they are applying to their selection of displays. Display sponsors can capitalize upon the grocers' ideas in this regard in their promotion of displays, through direct mail or through salesmen, jobbers, etc.



Grocers' reasons for using displays

UPPER	MIDDLE	POOR	MIXED
"Fast seller" 48%	"Fast seller" 41%	"Fast seller" 31%	"Fast seller" 42%
"High profit" 24%	"High profit" 24%	"High profit" 28%	"High profit" 37%
"New item" 17%	"New item" 20%	"New item" 21%	"New item" 6%
"Quality product" 1%	"Staple" 5%	"To attract new customers" 6%	"Salesmen put it in" 6%
"Popular brands" 1%	"To attract new customers" 3%	"Staple" 5%	"Staple" 6%
Other reasons 9%	Other reasons 7%	Other reasons 9%	Other reasons 3%

CHART 7

Above: It will be noted from a study of this chart that dealers in all classes of neighborhoods prefer displays of fast selling items, high profit items and new items, in that order, to any other form of display. Differences exist, however, in the percentage of grocers sponsoring each reason. Referring to the last line in the chart, it will be noted that from 7 to 9 per cent of the grocers in upper class, middle class and poor neighborhoods advance other reasons for selecting displays beyond those stated in the chart. Below: Dealers' objections to displays are here listed, by class groups, in the order of their frequency of expression by grocers. Where dealers have expressed more than one objection, all have been counted.



Grocers' objections to displays

UPPER	MIDDLE	POOR	MIXED
"Lack of space"	"Lack of space"	"Displays too large"	"Lack of space"
"Displays too large"	"Too many displays"	"Lack of space"	"Prices should not appear on displays"
"Displays not changed often enough"	"Displays too large"	"Store too small for displays"	"Displays too large"
"Prices should not appear on displays"	"Not enough displays"	"Not enough displays"	"Too much appears on displays"
"Not enough small-size displays"	"Prices should not appear on displays"	"Prices should not appear on displays"	"Displays are not colorful enough"

CHART 8

It will be noted that the first three reasons, "because the product is a fast seller," "because the product offers a high profit" and "because the product is a new item" appear in one, two, three order in all four classes of stores. Significant differences exist, however, in the percentage of grocers sponsoring each reason.

For instance, while all classes of dealers seem to have a preference for the display of fast selling items, this preference is most pronounced in stores in upper class neighborhoods and is least notable in the poorer stores. High profit items are selected for display by 24 per cent of the dealers in upper and middle class stores, by 28 per cent in the poorest neighborhoods, but by fully 37 per cent in the stores located in mixed neighborhoods. These latter are usually stores on main arteries, the location where the most progressive and most intelligent of the independent merchants are established.

Quite the opposite is the case in regard to those dealers who think the newness of the item is a primary reason for utilization of a display. From 17 to 21 per cent of the dealers advance this reason in neighborhood stores, irrespective of neighborhood class, but only 6 per cent of the dealers in the stores located on the arteries would sponsor new item displays in preference to any others. This would seem to indicate that the last mentioned class of dealers recognize the transient nature of a portion of their trade and therefore wish to capitalize upon established product reputations rather than to aid in building new ones.

Another interesting observation is to be had by reference to the last line of Chart 7. It will be noted that from 7 to 9 per cent of the grocers in upper class, middle class and poor neighborhoods advance other reasons

for selecting displays beyond those stated in the chart. This figure drops in the case of the more progressive group of dealers to only 3 per cent. This would indicate—once again—that these dealers have given more thought to the subject of displays, have checked display results more accurately and therefore have more confirmed opinions and more universally held opinions than do the smaller operators located in neighborhood shopping centers.

Objections to Displays

Quite as important as the grocer's reasons for using or selecting displays is his reason for rejecting other types. The display sponsor is not always in a position to play up to the dealer's opinions favoring the use of one or another type of display. He can, however—in almost every instance—seek to avoid every one of the grocer's major objections which lead to the rejection of a display.

These objections are listed in Chart 8, by class groups, in the order of their frequency of expression by dealers. Where dealers have expressed more than one objection, all have been counted. Hence no percentage figures are utilized on this chart.

An examination of the chart will, however, disclose one predominate objection—expressed in varying words—in all classes of stores. Dealers simply will not give space willingly to displays that they consider to be too large. They have become increasingly aware of the value of their display space and they do not wish to give up any greater area of window or counter space to a product than can be justified by its sales potentialities. They would rather display two products in a given area

In all four classes of neighborhood, it would seem that dealers prefer window displays above counter units and counter units above floor stands, with wall signs coming in fourth place. This chart indicates a pronounced preference for one type of display over another.



Grocers' opinions as to the most effective types of displays

UPPER	MIDDLE	POOR	MIXED
Window 80%	Window 48%	Window 75%	Window 55%
Counter 10%	Counter 38%	Counter 22%	Counter 23%
Floor 5%	Floor 12%	Floor 2%	Floor 13%
Wall 5%	Wall 2%	Wall 1%	Wall 9%

CHART 9



Are Grocers offered too many displays or too few?

	UPPER	MIDDLE	POOR	MIXED
% Claiming to use all displays	100%	77%	80%	77%
% Claiming selective use	—	23%	20%	23%

CHART 10

A surprisingly high percentage of grocers claim to use all displays offered them. In the upper class stores, fully 100 per cent of the dealers claim to use all displays. In the other classes, the figure ranges from 77 to 80 per cent. The percentage of dealers claiming to select displays for use is comparatively low.

and make two sales thereby and they are not in the least hesitant to express this opinion.

Dealers seem to be disturbed also by the fact that prices are frequently printed on displays. Such price statements are, of course, linked closely to manufacturer price policies and to the effort to maintain advertised prices. Yet, such recognition of this dealer objection would seem to be advisable. If the company policy dictates the use of fixed price marking, pre-printed on the display, it would at least seem to be desirable that the display sponsor propagandize the dealer as to his reasons for insisting upon price marking.

In a number of instances, dealers' objections to price marking is not based upon any objection to price maintenance. He complains, rather, because a printed price seems to deprive him of his initiative in fixing prices. He feels that his customers will conclude—from a view of such displays—that he is selling at a high price fixed by the manufacturer while the dealer who does not use the display is not thus committed in his customers' eyes, even though his prices may be at the same level. If such be the case, it might seem advisable for displays to be designed with imprinted prices where necessary. But these imprints might be made to look as if they were added to the display by the grocer himself. Instead of utilizing standard types or fine hand lettering effects for price quotations, such prices might be scrawled upon the display, designed in exactly the manner in which the grocer would do it if he were placing his price on a blank spot of the display.

Preferences for Types of Displays

In another portion of the survey, we have sought to

discover whether any pronounced preference for one type of display over another existed in dealers' minds. It will be noted that, once again, the breakdown by class and neighborhood has been followed and this breakdown discloses some significant differences of opinion. See Chart 9.

In all four classes of neighborhood, dealers prefer window displays above counter displays and counter displays above floor stands, with wall signs coming in fourth place. (A word of caution is here indicated, since these figures differ widely from Chart 1 in the first section of this survey which showed actual dealer usage of such displays.)

Considering the window display group, it will be noted that 80 per cent of the dealers in upper class neighborhoods favor window displays as being the most effective. Some 75 per cent of the dealers in the poorest neighborhoods have the same opinion, but only 55 per cent in the main line mixed neighborhoods and only 48 per cent in the middle class neighborhoods are convinced that window displays are the most effective type.

Counter displays get only 10 per cent of the choices in upper class neighborhoods. They get from 22 per cent to as high as 38 per cent in the other divisions. Floor stands are favored in a substantial percentage of the middle class and mixed class stores. They have little favor among the upper class stores and, probably because of lack of space, have almost no favor among the dealers in the poorest neighborhoods. Wall signs are recognized as a definite medium by dealers in the upper class stores and in the mixed stores. They run, however, a very bad fourth in both the middle class and the poorer neighborhoods. (Continued on page 78)

THE CASE OF THE BEWILDERED CUSTOMER

"It doesn't pay for us to handle a quantity that small. The unit cost would be prohibitive.

WHY NOT TRY MERIT—THEY'RE GEARED PERFECTLY FOR THE COMPLETE PRODUCTION OF SHORT RUNS, BROKEN RUNS, SMALL DISPLAYS, ETC."



**LARGE
LITHOGRAPHER**

**GENERAL
PRINTER**



"It would take too much time. We haven't an art department. We'd have to send the job out for mounting and finishing. And that would put the cost up.

WHY NOT TRY MERIT COMPLETE SERVICES: LAYOUT, ART, SILK-SCREEN, LETTERPRESS, DIE-CUTTING, MOUNTING & FINISHING: UNDER ONE ROOF."

Merit has just about every facility from the first rough layout to the most intricate die-cutting and finishing services right under its one roof. All the departments of display creation, layout, artwork, silkscreen and letterpress printing, die-cutting, mounting and finishing are integrated into a smooth organization especially adapted to the solution of difficult display problems. Small runs of large displays, large runs of small displays, broken runs and a host of other tough assignments are handled daily along with more routine jobs.

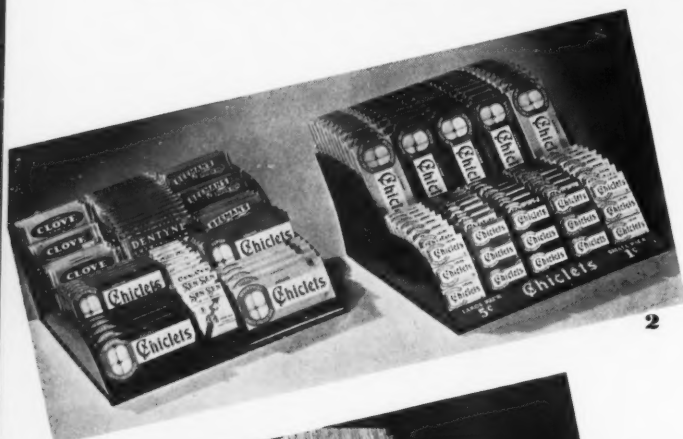


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Complete Production Facilities for
Letterpress, Screening, Die-Cutting,
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DISPLAY DESIGN MERCHANDISING DISTRIBUTION

DISPLAY GALLERY

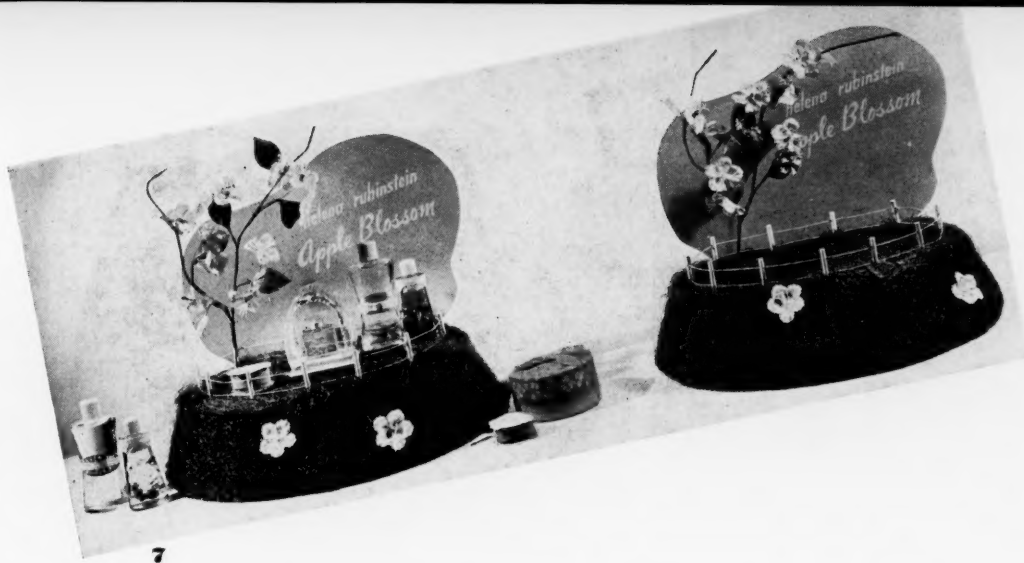


1 Using a forced perspective on the massive oak doors which provide the theme for this display, Schenley Distillers Corp. secure window dominance and concentrate consumer attention upon a single bottle of the product. Set on a simple stage and further emphasized by a curved metallic foil background, side cards re-emphasize the copy theme of the display. Produced by Einson-Freeman Co., Inc.

2 Following up upon its successful experience with plastic counter merchandisers for one-cent packages, the American Chiclet Co. has introduced these two new units to hold both penny containers and the new five-cent window cartons. The molded units are designed in tiers to achieve maximum display value for each package. Cartons by Fort Orange Paper Co. Transparent acetate window material by the Celluloid Corp. Phenolic plastic molding material by Bakelite Corp., unit of Union Carbide & Carbon Corp. Designed and molded by the Northern Industrial Chemical Co.

3 An effective background for the attractively packaged merchandise is achieved by this Perfecto Garcia display through a combination of woodgrain papers and silkscreen printing. The three background panels, simulating oak beams, are cut out to hold the cigar boxes and are supplemented by a ramp-like front panel and four side pedestals, affording ample flexibility to meet all window conditions. Produced by Gregory, Inc.





7

4 Selected for top award in the fifth annual Babson Institute display contest is this unit of the W. A. Sheaffer Pen Co. Lithographed on a number of planes, the diorama is designed to focus attention upon the Santa Claus character doll holding a full size pen in his extended hand. Created and produced by The Forbes Lithograph Co.

5 Ingenious construction of this three-dimensional wooden pylon display permits the lightweight unit to mount an actual full size tire. The U. S. Rubber Co. reports widespread acceptance by automobile dealers, usually most reluctant to install tire display fixtures on show room floors. Designed and manufactured by Kay Displays, Inc.

6 To promote a new oil crayon, The American Crayon Co. has been successfully utilizing this come-and-try-it counter unit which provides an open box of crayons and a pad of drawing paper for the experimentally minded customer. The box top fits into a die-cut portion of the display background. The unit is furnished to dealers on crayon orders in excess of \$10.00. Produced by the Blade Printing & Paper Co.

7 Combining artificial grass, a silkscreen background and white wire with artificial flowers, Helena Rubinstein, Inc., is reported to be receiving widespread dealer acceptance for this Apple Blossom display. Designed by T. Horan and produced by Alfa Displays, Inc.

8 To introduce its new packages, Seymour Smith & Son, Inc., utilize this small shipper-display which unfolds to form a sturdily eased counter unit, permitting consumer examination of the product. Designed by Frank Condon. Produced by Robert Gair Co., Inc.

9 To demonstrate the ease with which the consumer may break its dual loaf of packaged bread in half, the W. A. Long Co. has been utilizing this three-dimensional motion display. A small electric motor moves dummy loaves back and forth to simulate the breaking action, while cut-away lettering at the center of the unit flashes its message. The legends printed on the small circles immediately above the bread move with the loaves. Designed and lithographed by Stemar Displays Co.

10 Designed to give the consumer the whole story of a combination deal at a single glance, this full dozen counter vendor is reported by the American Safety Razor Corp. to be recording remarkable sales records. The differently shaped cartons are held in pairs in die-cut boats imprinted with the special combination price. The acetate windowed razor box adds further to the eye appeal and explanation value of the display, placing the dominant features of the new razor in a bullseye setting. Display carbon by Gibraltar Corrugated Paper Co., Inc. Display card by Industrial Lithographic Co. Razor carton by F. N. Burt Co. Acetate window material by the Celluloid Corp. Boat by J. & P. B. Myers Co.

8

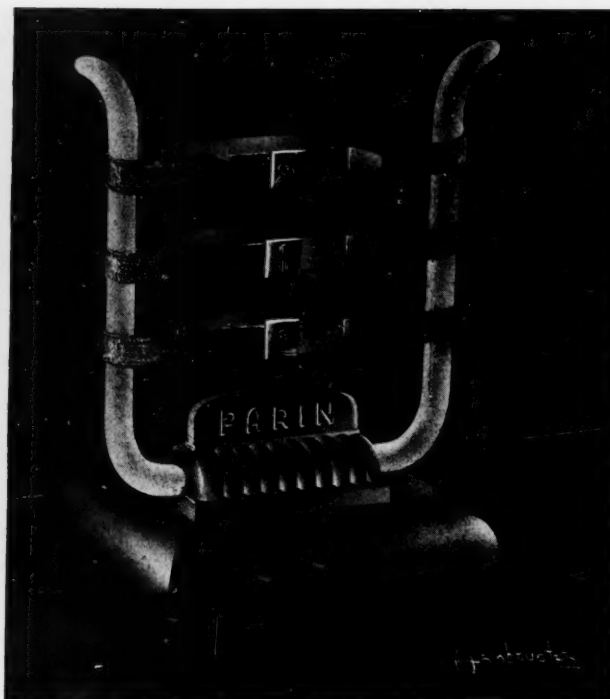


9



10





1 2

1. Designer Armbruster's conception of how cigarette lighters might be displayed to best advantage. The unit, made of plastic material, is designed to suggest a flame, light being utilized to further this impression. A molded drawer is incorporated in the display for storage purposes. 2. Correlation between the product displayed and the display itself is achieved here. Cow horns are molded from a plastic material to tie-in with the cowhide belts. Light may be used if desired.

PLASTICS for displays

by H. S. SPENCER*

Counter displays must sell. Basically their job is to sell the goods advertised or displayed.

A salesman or display with the personality of a last year's bird's-nest does about as much business.

Too many displays look cheap—and we're not talking about their cost. Cost is not always the determining factor. Too many displays lack animation or, like individuals, what it takes. Too many are not practical from the dealer's point of view; they don't fit; they're the kind that he gives the "It's all right but" explanation as to why they are not used.

A display should be thought out before even a model is made of it. It should be investigated in the field, on the counter. It must have a personality, be good enough to do the job intended—short life or a long one. If it is made right, planned correctly and placed properly, it will sell goods.

*Durez Plastics & Chemicals, Inc.

The materials of construction for display manufacture are innumerable. Among the newer are plastics and they offer many distinctive features such as attractive surfaces easily kept clean and of great durability in that they do not scratch readily, will not scuff, dog-ear, tarnish or dent. Plastics are not fragile, are easy to pack and ship, light in weight and lend themselves to almost any design or color scheme.

Plastics lend themselves to creating three dimensional reproductions perfectly and anything that can be engraved in steel or cast in die alloy can be reproduced faithfully in these synthetic molding materials. Today's family of plastics offers the widest range of color, translucency, transparency or opaqueness in materials.

In counter displays, attention is the first job, as it is in any manner of selling, not with a blatant slap in the eye but, where practical, through motion or light

or a symbol or trade character. For example, the most valued space in a drugstore is that near the cash register. As a rule it is here that the buyer approaches the drug clerk and certainly here that he receives his package and change. But it's usually a small space between the register and the showcase and valuable because every transaction culminates here. Naturally, it can't be cluttered up, but it is a grand place for a dispensing display—right here by the customer's hand, right under his eye. But the display must be made to fit that spot or it won't get there. This same principle holds true whether it is this particular spot or any other within the four walls of any store.

To be specific, let us consider a pocket cigarette lighter. It's a small item and lends itself to counter space, so we cannot only display, but in our display allow space for storage. Lighters suggest flame. Very well, we'll employ it as an eye-catcher and with a small motor secure a rotation of colorful light under our flame replica made either of glass or transparent plastic material. (See figure 1.) For our base and storage compartment, we'll employ a black phenolic molded plastic and adopt the suggestion of designer Armbruster to insert the glass or transparent plastic display space cover from the under side or rear to prevent its easy removal from the outside and possible pilfering. We'll include a molded drawer which will slide into the compartment as a storage container, and employ a horizontal decorative design at the lower

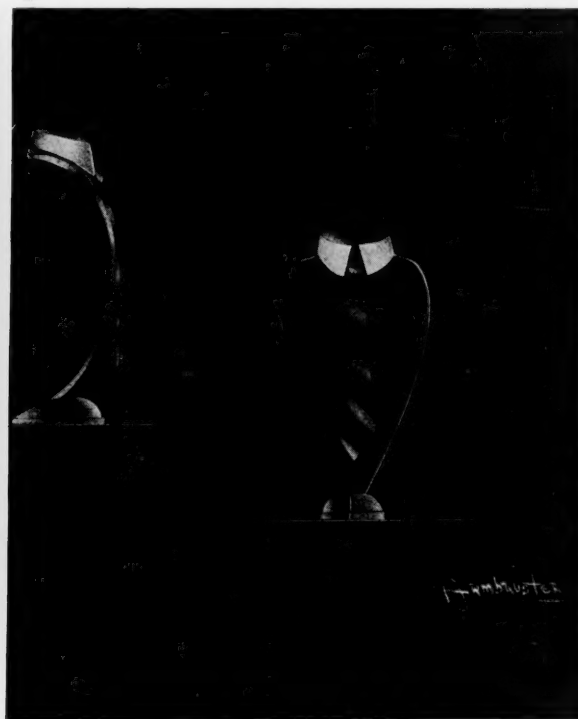
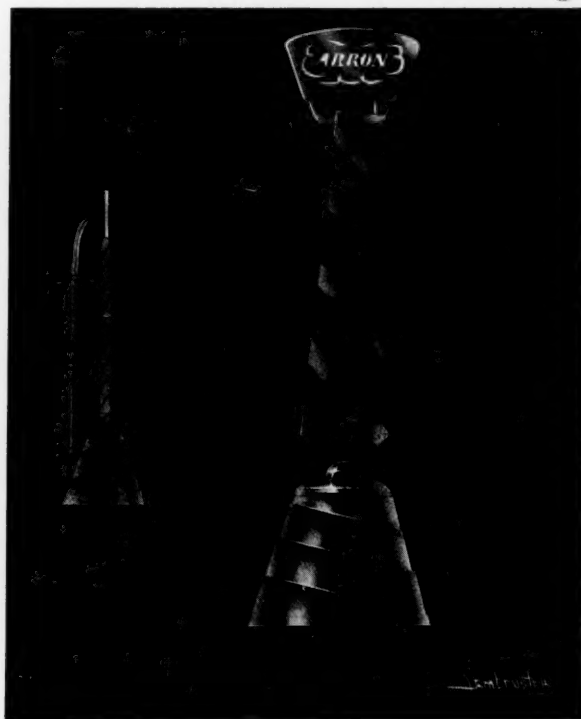
front to carry the eye up to the product and product name which will center between the product and the flame, for there it should secure excellent visibility.

As pocket lighters might logically be displayed in the haberdashery, let's look around and see what in the haberdasher's stock might be displayed or aided toward sales through plastic displays: belts, neckties, collars (and collars, it would definitely seem, need some sales help).

Cowhide belts suggest cows. Transparent plastics or translucent plastic material formed into horns would be symbolic and we can employ them (see figure 2) using a phenolic plastic base. We can illuminate them or not as we choose. If we decide to illuminate them, we will mount our lights under the center section where our name appears and for best results we will use the transparent plastic material and arrange the name support so that it may be lifted off for changing of light bulbs. Or, to save expense we can build this section solid, using wiped-in lettering on a contrasting background.

Neckties. There are manufacturers who feature "non-wrinkle," "long wear," etc. Such ties obviously lend themselves to demonstration, so let us see what we can do to prove that they do wear. A molded plastic base with spiral lines suggests twisting (figure 3). Inside this base we'll use a motor and through it actually twist the tie. At a sufficient twist, we'll throw our motor out and the slow- (Continued on page 88)

3. Ties might well be displayed on a unit of this type to demonstrate a particular quality or qualities for the product. Thus a claim of "long wear" may be demonstrated through the use of this unit which incorporates a motor in its base which twists the tie at regular intervals. A supporting rod in the rear supports an identifying nameplate. 4. Collars might be displayed on a unit molded of luminous plastic material. Thus the collar can be viewed as it appears when worn.

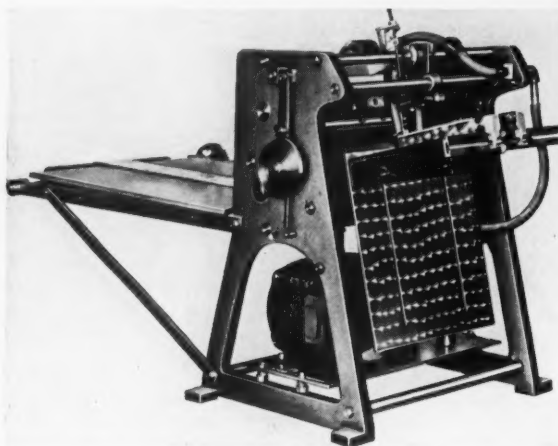


Equipment and Materials

NEW DEVELOPMENTS IN PACKAGING MACHINERY • METHODS and SUPPLIES

CODING AND IMPRINTING UNIT

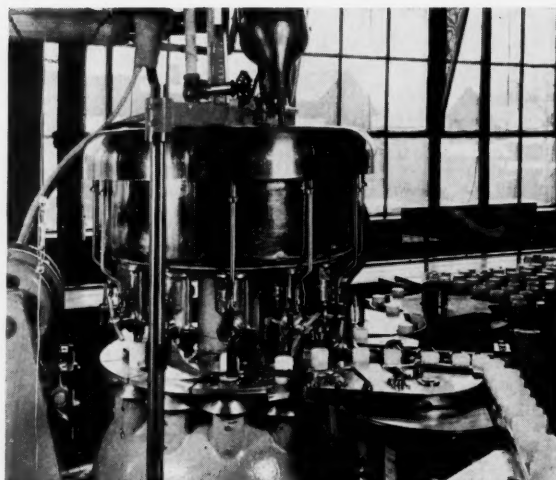
A label coding machine, intended primarily for the imprinting of code numbers on labels and circulars but which can be used to imprint brand names and other pertinent data, has been developed by F. L. Smithe Machine Co., Inc. The machine can be placed on a bench and occupies a space of 24 in. by 42 in., standing



25 in. high. It is reported to be completely adjustable, having a range in size from 1 $\frac{1}{8}$ in. by 1 $\frac{5}{8}$ in. up to 6 in. by 10 in. Labels can be coded or imprinted at speeds ranging from 150 to 250 per minute. Changeovers from one size to another can be made in approximately five minutes. The numbering head is adjustable and does not have to be removed from the machine for different code numbers. Code numbers can be placed in the margins, at the top or bottom or sides of labels. Registry is claimed to be perfect, because the label is positively held on the imprinting drum by means of grippers. The machine is said to be so simply designed that an unskilled operator can run the unit and make all necessary adjustments.

AUTOMATIC FILLER

Unavoidable variations in volume capacity of small size jars frequently cause serious difficulties because of overfilling or underfilling when using automatic filling machines for free-flowing products, hot or cold, for proprietary, cosmetic, food, industrial and other products put up in jars, cans or other containers. The difficulties of underfilling or overfilling are said to be overcome by a new high-speed machine, known as the



FMC Special Filler, produced by the Food Machinery Corp. The filler has a type of control which does not release a given volume, but cuts off flow of material at a predetermined level, filling all containers to the same predetermined height, regardless of small variations in the capacity of containers. The unit is said to not only fill all containers to the same level, but the filling nozzle is positioned in the center of the jar so that each jar is finished with an attractive, full "crowned" appearance. Adjustment is claimed to be so exact that containers can be filled extremely close to the rim if desired. The operation of this automatic filler is said to be made possible by a completely new type of filling-control mechanism. Twin tubes project down to the container from the rotary valve. Material flows into the container through one of these tubes and continues to flow until it reaches the level of the second tube, which is an air intake tube leading to the reservoir chamber. The instant the air tube is closed by the material, the flow stops.

NEW PACKAGE TYING RIBBON

The Lion Ribbon Co. has announced the development of a new package tying ribbon to be known as Crumple Tie. Made of Pliofilm—product of the Goodyear Tire & Rubber Co.—the ribbon is water-proof, grease-proof and stain-proof. Though thin as tissue, the new tying material has strength and durability and may be tied into attractive bows and other decorative effects. Crumple Tie is available in a wide range of colors, transparent, opaque or metallic. It is supplied in 100-yd. rolls, the ribbon being 4 in. wide.



Margin of Safety

You can buy bonds yielding 2%, and others yielding 10%. Both have the same face value—both may be met at maturity—but there's a big difference in the *margin of safety*.

"Mikah" Glues are *safety* glues, and a sound investment. You can buy *cheaper* adhesives—but is the possible small gain worth the risk involved?

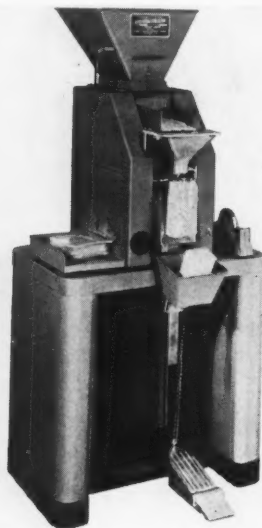
NATIONAL ADHESIVES

DIVISION OF
NATIONAL STARCH PRODUCTS INC.

820 GREENWICH ST., NEW YORK—CHICAGO—PHILADELPHIA—BOSTON—SAN FRANCISCO—and All Principal Cities

WEIGHING MACHINE

The Triangle Package Machinery Co. announces the Junior Elec-Tri-Pak, a new addition to its standard line of Elec-Tri-Pak weighers. The machine is designed specifically for firms having widely diversified products to package, such as beans, peas, rice, tapioca, barley, nut meats and similar items. The unit weighs and fills bags, bottles, cartons, cans or envelopes. The mechanical action is unique in that the feeding is



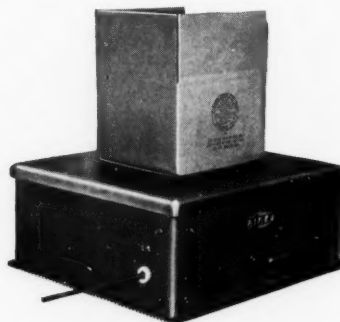
accomplished by electrically vibrated feed plates which discharge the product to be packaged. When the package has reached a predetermined weight, the feeding mechanism automatically shuts off by tipping the balance beam of a scale which controls a mercury switch. The package is released from under the spout by the operator and a new package inserted, at which time the feeding action is resumed. A hopper on top of the machine accommodates a considerable amount of the product to be packaged. The unit is a one-operator machine and is provided with a stand and a gummed tape machine for sealing bags. The weigher is compact, light in weight and can be moved around with ease. The unit is claimed to be capable of weighing accurately from exact to $\frac{1}{8}$ oz. plus or minus. It has only one speed, producing 6 to 12 weighings per minute.

PRINTED STEEL STRAPPING

The Acme Steel Co. has dressed up the familiar black or galvanized steel strapping, used to add strength to safely carry shipments to their destination. Steel strapping may now be had printed in attractive colors, carrying an advertising message, a slogan, a trade mark or brand identification. The new printed steel strapping is particularly adaptable for such shipments as box shooks, frames, doors, flooring, etc., where it is difficult to label and identify the products. When containers are strap-bundled into a single unit for shipment, the printed steelstrap eliminates the necessity



of duplicate labeling. The wide range of designs and colors available permits manufacturers to identify and beautify shipments of almost any type of product. The printed Acme Steelstrap can be applied with regular tools, providing the reinforcing and bundling advantages of ordinary steel strapping.



VIBRATING PACKER

The Ajax Flexible Coupling Co. has developed a vibrating packer which is designed for effective settling and compacting of materials in various types of containers as they are filled. A shaking mechanism is attached to the under side of a platform mounted on coil springs and the vibrating movement acts to pack down loose material in the container resting on the platform. The vibrating packers are made in two standard sizes. Capacities as to weight of material that can be handled are up to 75 lbs. and 500 lbs.

SEALING COMPOUND

A new product—known as Inceloid sealing compound—has been developed by the American Products Mfg. Co. The viscous solution, it is reported, may be applied to the outer face of containers—fibre, metal, molded plastics, etc.—acting as a sealing and protective covering at the joints. The solution is said to dry to a non-tacky film, adhering tenaciously to highly polished surfaces. The composition is sufficiently fluid to be applied by means of a brush or spray gun. The seal, it is claimed, is impervious to the transmission of moisture. The sealing compound is available in all the standard transparent colors and may be pigmented in the form of metallic iridescent coatings.

Wide Scope for Holiday Wrapping



Model FA

Special holiday wrapping presents no problem to the owner of a Model FA. No matter how many different sizes of packages are to be wrapped, the FA handles them quickly and efficiently. For example, all the Whitman Holiday Boxes shown here are wrapped on one FA machine.

Extremely versatile, the FA handles extension-edge boxes, turned-up-side trays, and open boats, as well as ordinary cartons. Quickly adjustable for a very wide range of sizes. The change from one package size to another takes *only ten minutes*—one-third of former time required.

The FA may be equipped to handle any type of wrapping material. Although the Whitman machine uses printed wrappers in sheet form, the FA can just as easily be equipped with a roll feed and, if desired, can be provided with an electric eye for accurate registration of printed material fed from a roll.

Consult our nearest office.

Write for folder on the FA

PACKAGE MACHINERY COMPANY • Springfield, Massachusetts
 NEW YORK CHICAGO CLEVELAND LOS ANGELES TORONTO
 Mexico, D F., Apartado 2303 Buenos Aires, Argentina: David H. Orton, Maipu 231
 Peterborough, England: Baker Perkins, Ltd. Melbourne, Australia: Baker Perkins Pty., Ltd.

PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

THE STORAGE OF PACKAGING MATERIALS

(Continued from page 60)

more than two or three bundles in height, or, unless too large, they should be stacked on end. This applies particularly to waxed and lacquered glassines. Cautions against excessively deep stacking apply likewise to bags and other materials fabricated from glassines.

Waxed Papers

Waxed paper, as furnished in rolls, is usually most carefully wrapped by the supplier to afford adequate storage protection. One manufacturer, for instance, uses a corrugated paper sleeve with corrugated circles at top and bottom of the roll over which a tight paper wrap is applied and taped into place.

It is important to avoid bumping of the edges of the roll of waxed papers as such a bump may cause small tears to appear in the paper. When a roll which has been so bumped is put on to a machine, the natural jerk of the machine strains these slight tears and it sometimes becomes impossible to work the roll satisfactorily.

In cases where a bump does not result in tearing of the roll, it may still dent a few surfaces of the paper on the roll. This dent then interferes with the tension on the roll of the packaging machine and again provides a potential source of trouble.

Waxed paper should be stored in a cool place, certainly not one exceeding 70 deg. F. Some waxed paper users find that, in extreme summer temperatures, they get better operation on the machine by placing the rolls in a refrigerator or cold room for a few hours in advance of use. This practice is particularly common among bakers who, of course, have the available necessary refrigeration facilities.

The storage conditions apply equally well to waxed paper in sheet form with the exception of problems affecting machine operation wherein requirements are naturally not quite as strict as in the case of rolls.

Aluminum Foils

Manufacturers advise the maintenance of humidity at as nearly uniform a point as possible and control of temperatures within a range that might be considered normal. It is wise to avoid transfer of stored aluminum foil from a hot temperature to a cold one for the reason that this sometimes causes condensation. This, of course, is true of a number of other materials as well.

Transparent Cellulose Vials

Normal temperature and humidity conditions are recommended for storage of transparent vials, tubes, bottles and specialties. It is particularly unwise to store any form of cellulosic material in a particularly cool room for any length of time. Exposure to light is

not a problem in the usual storage of these vials since they are shipped by the manufacturers in cartons which protect them from light. Storage in direct sunlight is, of course, to be avoided.

* * *

Readers of Modern Packaging are invited to submit further data regarding their own experiences with the storage of various packaging materials. Future articles will deal with the storage of metal containers, closures, set-up paper boxes, bags, seals, tags, plastic containers and numerous other items. Information on these categories of materials will be gratefully welcomed.—Ed.

WHAT THE GROCER WANTS IN DISPLAY

(Continued from page 68)

Too Many Displays or Too Few?

In the survey of druggist display preferences (Modern Packaging, September and October, 1939), fairly complete figures were obtainable as to the percentage of displays of each type which are used by the druggist—that percentage being figured as against the total number of displays of each type which are offered to the druggist. A preliminary pilot survey in the grocery field quickly disclosed the fact that such figures could not be obtained with any accuracy among grocers. This was due, in part, to the different educational level of grocers as compared with pharmacists.

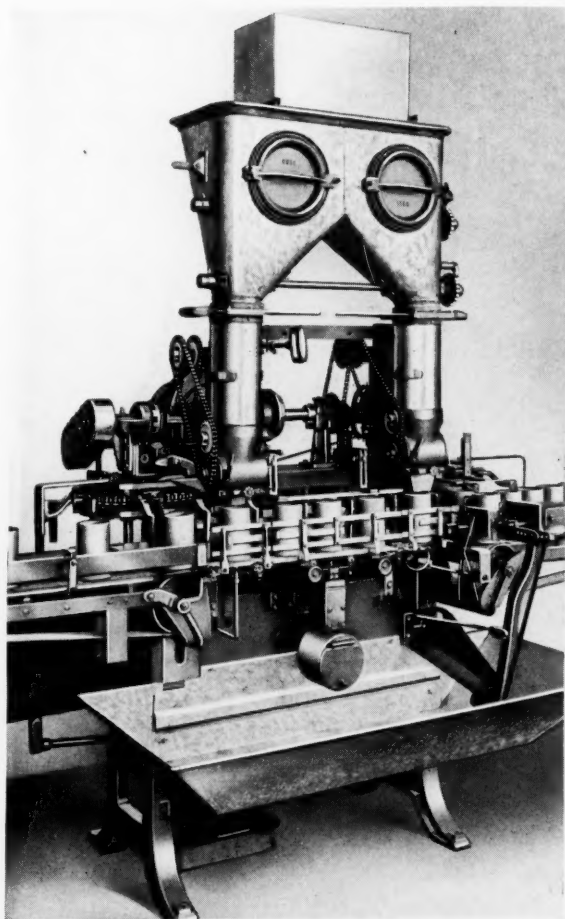
Nonetheless, some clear indications as to the degree of saturation of the display field are available. Grocers were asked whether they used all displays offered to them or whether they selected displays for use. A surprisingly high percentage claim to use all displays and usually follow up this claim by stating that they would use more if they could get them. Such claims are, of course, not quite truthful. Stores claiming to use all displays offered them were found, in practice, to be discarding a certain proportion.

Nonetheless, their expression of this claim exposes the dealers' desires for displays. In the upper class stores, fully 100 per cent of the dealers claim to use all displays. In the other classes, the figure ranges from 77 to 80 per cent. It will be seen, therefore, that, by and large, manufacturer sponsorship of displays, extensive though it may be, has by no means reached a saturation point. A good display can still achieve acceptance from dealers in a surprisingly large number of instances if other conditions affecting the potential of the product are right.

That this is a healthy condition cannot be doubted. It offers an opening for the smaller manufacturer in particular or for the sponsor of a new product. Such manufacturers can know in advance that if the product is right and the display is well designed they can obtain dealer display space without too great an expenditure of time, effort and investment.

There's Only One Answer

TO YOUR PACKAGE FILLING OR WEIGHING PROBLEM



TWO SCALE GROSS WEIGHER (above) and FOUR SCALE NET WEIGHER (right) are just two of dozens of Pneumatics for this class of work.

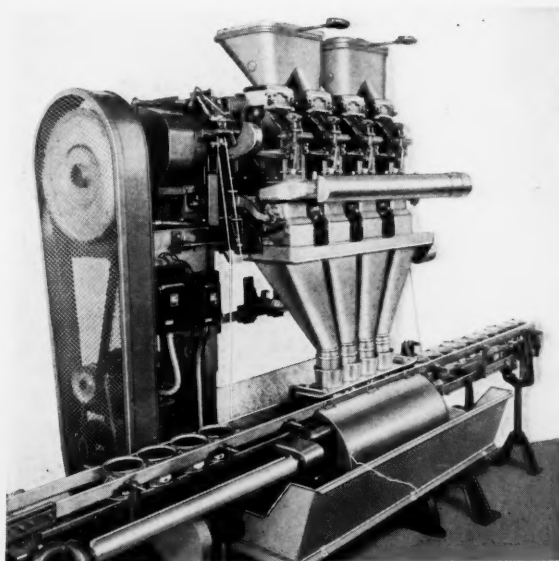
Although there are many ways to fill your package with a given quantity of your product, only *one* of these is best suited to your exact needs. That's where Pneumatic can help you — in selecting the right equipment to guarantee "lower cost per container."

Gross weighing, net weighing, accurate measuring or certain combinations of weighing and measuring — all are needed to handle the varied requirements of packaged goods makers. During the past five decades Pneumatic has studied and solved hundreds of weighing and measuring questions. The fund of knowledge built up by this practical experience is available to you without cost.

In general "measuring" is restricted to small packages, under 8 oz., as inaccuracies increase as load increases. For a varied group of products or for stubborn materials "gross weighing" is usually best. For free flowing materials and for closest accuracy "net weighing" is generally the answer. We will welcome the opportunity to study your filling and weighing problems and give you our best advice.



* You should have a copy of Bulletin 100 which pictures 17 different Fillers and Weighers as well as 23 other Pneumatic packaging and bottling machines. Send for your copy today!



PNEUMATIC SCALE CORPORATION, LTD.
71 Newport Ave., Quincy, Mass. (Norfolk Downs Station)

Branch Offices:
NEW YORK • CHICAGO • SAN FRANCISCO • LOS ANGELES



*How to Fasten a product
with....*

**MAXIMUM
SALES APPEAL**

**MAXIMUM
PROTECTION**

**MINIMUM
COST**

**ON PRODUCTS
LIKE THESE
the answer
is
Bostitch**

The products illustrated here are only a few of thousands which go to market fastened *better* with wire—by Bostitching—neater, stronger, more economical.

Bostitch-stapling fastens small articles to display cards or labels to products . . . neatly, inconspicuously.

Bostitch-stapling provides a strong fastening that won't be loosened by dampness . . . resists rough handling . . . and discourages pilferage.

Bostitch-stapling often brings carding or assembly costs way below other fastening methods—such as glue, tape, thread, tacks, etc.

Bostitch machines are simple, convenient to operate, fast-working. 782 easy-to-operate models allow you to select the right machine . . . to start with a small investment and to expand production capacity as your requirements grow, progressing economically through means of liberal trade-in, budget and rental policies.

18 Research Engineers and over 300 representatives specializing exclusively on fastening problems will help you adapt these Bostitch machines and methods to your needs. Send samples to be fastened or write for free folder, "Bostitch Fastens It Better With Wire."



Bostitch fastening is neat—does not spoil attractiveness or obstruct reading



Even a heavy article like this scraper is held securely by a single staple



Multiple-unit display handled very inexpensively—two staples per piece

**SALES APPEAL
PROTECTION
ECONOMY**



**SALES APPEAL
PROTECTION
ECONOMY**



**SALES APPEAL
PROTECTION
ECONOMY**



BOSTITCH
56 Division St., E. Greenwich, R. I.
Please send me free folder "Bostitch Fastens It
Better With Wire."

Name
Title.....
Company
Address.....
Type of Product to be Fastened.....

6-40

BOSTITCH
Gives you all three

**SALES APPEAL
PROTECTION
ECONOMY**

BOSTITCH—56 Division Street, East Greenwich, R. I.

BOSTITCH—CANADA, Ltd., Montreal

STANDARDIZED MATERIALS INDEX

Previously published cards available

A limited number of sets of 69 cards which have previously been published are available to readers of Modern Packaging. Requests will be honored on a first-come, first-served basis.

MODERN PACKAGING

Chanin Building, 122 E. 42nd St., New York, N. Y.

Please send me previously published Standardized Materials Index cards.

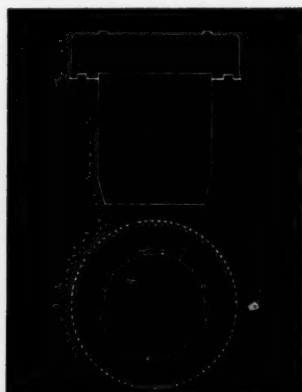
Name

Address



C.159

Molded screw cap. Available in pattern shown in standard sizes from 8mm. to 33 mm.



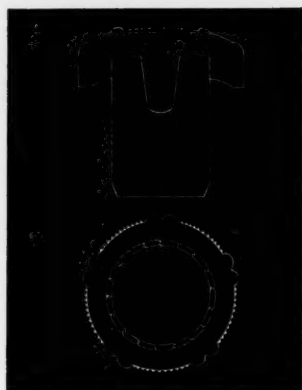
C.156

Embossed wood top cork. Available from stock in pattern shown in sizes 1-1/32 in., 1-3/32 in., 1-5/32 in. diameter by 5/16 in. thick. Stock colors, natural wood, black and brown. Special sizes or colors available three to four weeks after order.



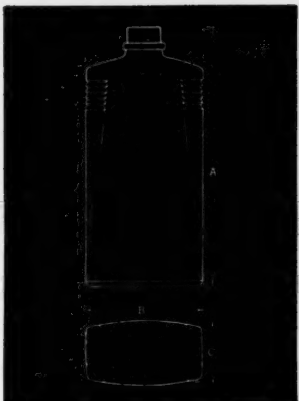
C.160

Mushroom cork. Available on special order.



C.157

Molded plastic top flanged cork. Available in stock pattern shown in 1 1/2 in., 1-5/32 in. and 1-1/16 in. diameter. Stock colors, black and brown. Special sizes or colors available three to four weeks after order.



G.628

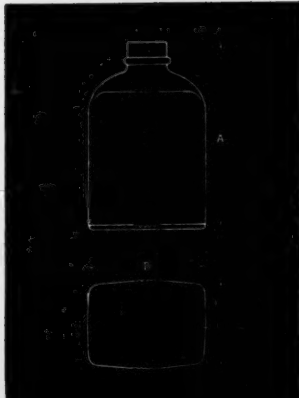
Blue glass bottle. Available from stock in the following size range:

Capacity	Weight	Finish
1/4 oz.	21/32 oz.	13 C.T., G.C.A. 425
3/8 oz.	15/16 oz.	13 C.T., G.C.A. 425
1/2 oz.	1-3/16 oz.	15 C.T., G.C.A. 425
1 oz.	2-1/16 oz.	18 C.T., G.C.A. 400
2 oz.	3 1/2 oz.	18 C.T., G.C.A. 400
3 oz.	4 1/8 oz.	20 C.T., G.C.A. 400
4 oz.	5 1/2 oz.	20 C.T., G.C.A. 400
6 oz.	6 3/4 oz.	24 C.T., G.C.A. 400
8 oz.	8 3/8 oz.	24 C.T., G.C.A. 400
12 oz.	13 oz.	28 C.T., G.C.A. 400
16 oz.	15 oz.	28 C.T., G.C.A. 400
32 oz.	26-5/16 oz.	33 C.T., G.C.A. 400



C.158

Molded jigger cup closure. Available in design shown in 28 mm. and 24 mm. sizes. Stock colors, black, brown or red.



G.629

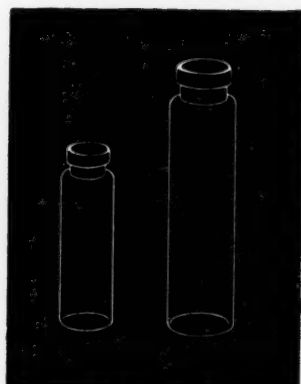
Blue glass bottle. Available from stock in the following size range:

Capacity	Weight	Finish
1/2 oz.	1-3/16 oz.	15 C.T., G.C.A. 425
1 oz.	2-1/16 oz.	22 C.T., G.C.A. 400
2 oz.	3 1/8 oz.	22 C.T., G.C.A. 400
2 1/2 oz.	3 1/2 oz.	28 C.T., G.C.A. 400
3 oz.	4 1/8 oz.	28 C.T., G.C.A. 400
4 oz.	5 1/2 oz.	28 C.T., G.C.A. 400
6 oz.	6 1/2 oz.	28 C.T., G.C.A. 400
8 oz.	8 oz.	28 C.T., G.C.A. 400
16 oz.	14 oz.	33 C.T., G.C.A. 400
32 oz.	23 3/8 oz.	38 C.T., G.C.A. 400
32 oz.	26-5/16 oz.	38 C.T., G.C.A. 400

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STANDARDIZED MATERIALS INDEX

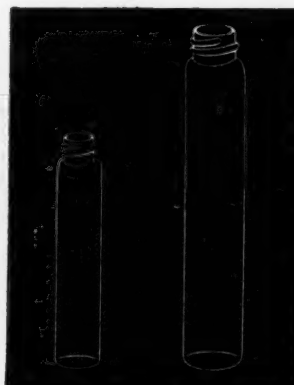


G.630

Patent Lip Glass Vials (Short Style) Stock Sizes

Drams	Approx. Outside Diameter	Length	Cork
1/4	9 mm.	30 mm.	00
1/2	12	35	0
1	15	45	2
1 1/2	16	50	2
2	17	60	3
3	19	65	4
4	21	70	5
6	23	85	5
8	25	95	6

Other sizes can be made to order

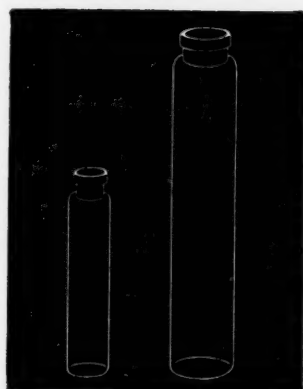


G.633

Screw Cap Glass Vials (Long Style) Stock Sizes

Drams	Approx. Outside Diameter	Length	Cap
1	12 mm.	60 mm.	8 mm.
1 1/2	13	65	10
2	15	75	13
3	16	90	13
4	18	100	15
6	20	110	18
8	22	120	18

Other sizes can be made to order

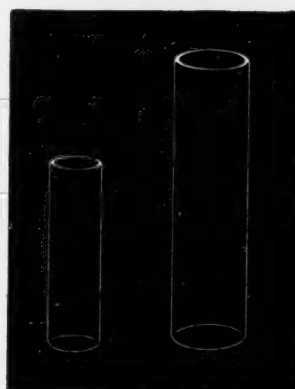


G.631

Patent Lip Glass Vials (Long Style) Stock Sizes

Drams	Approx. Outside Diameter	Length	Cork
1/4	8 mm.	50 mm.	000
1/2	10	55	00
1	12	60	0
1 1/2	13	65	1
2	15	75	2
3	16	90	3
4	18	100	3
6	20	110	4
8	22	120	5

Other sizes can be made to order

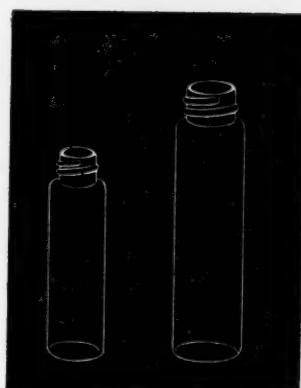


G.634

Glass Shell Vials (Short Style) Stock Sizes

Drams	Approx. Outside Diameter	Length
1/4	9 mm.	30 mm.
1/2	12	35
1	15	45
1 1/2	16	50
2	17	60
3	19	65
4	21	70
6	23	85
8	25	95

Other sizes can be made to order

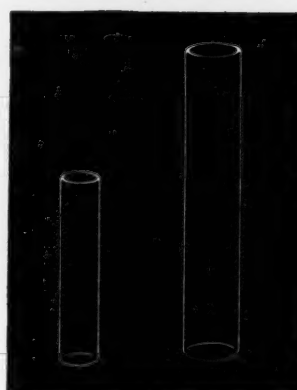


G.632

Screw Cap Glass Vials (Short Style) Stock Sizes

Drams	Approx. Outside Diameter	Length	Cap
1/2	12 mm.	35 mm.	8 mm.
1	15	45	13
1 1/2	16	50	13
2	17	60	15
3	19	65	15
4	21	70	18
6	23	85	20
8	25	95	22

Other sizes can be made to order



G.635

Glass Shell Vials (Long Style) Stock Sizes

Drams	Approx. Outside Diameter	Length
1/4	8 mm.	50 mm.
1/2	10	55
1	12	60
1 1/2	13	65
2	15	75
3	16	90
4	18	100
6	20	110
8	22	120

Other sizes can be made to order

RESEARCH DEPARTMENT MODERN PACKAGING

CHANIN BUILDING, 122 E. 42nd ST., NEW YORK, N. Y.

Please send me information as to sources of supply of items Nos.

.....

.....

as shown in your Standardized Materials Index.

Name

Address

RESEARCH DEPARTMENT MODERN PACKAGING

CHANIN BUILDING, 122 E. 42nd ST., NEW YORK, N. Y.

Please send me information as to sources of supply of items Nos.

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as shown in your Standardized Materials Index.

Name

Address

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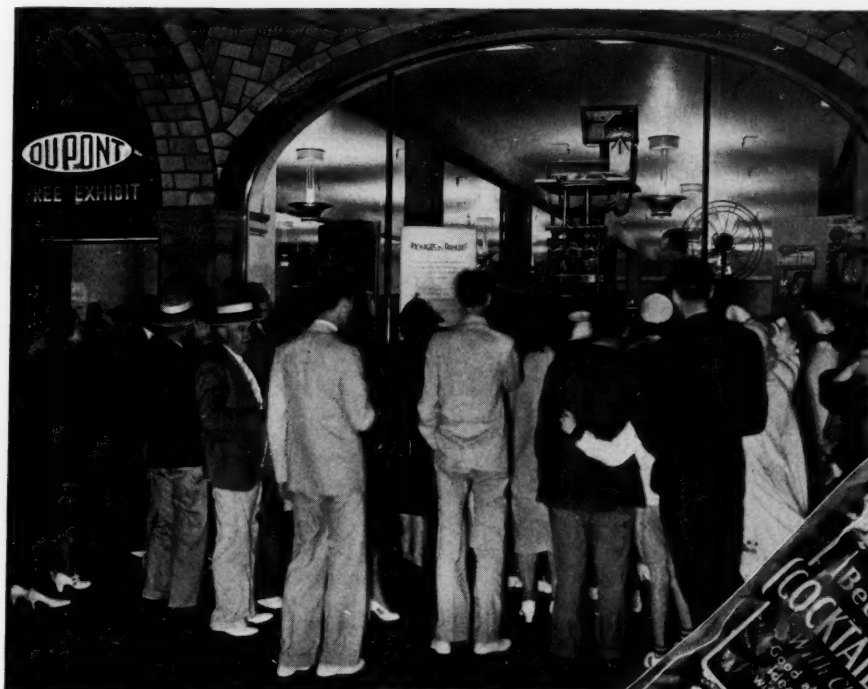
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ARE YOU GOING TO THE FAIR?



Stokes & Smith Transwrap Packaging Machine

You will see the

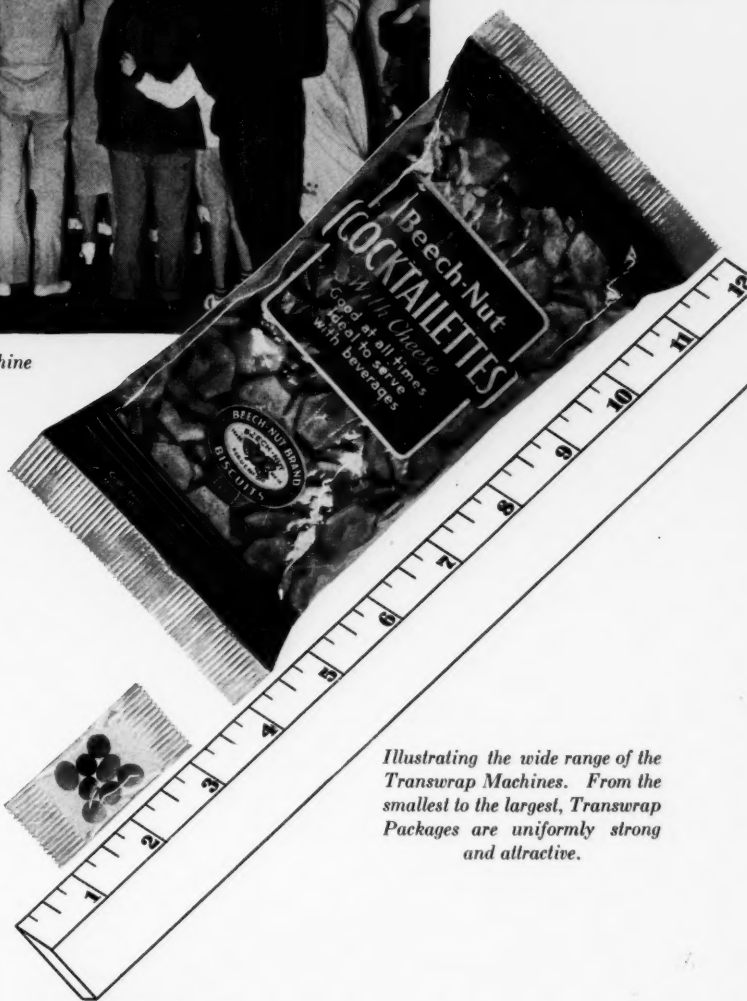
S & S **TRANSWRAP** **MACHINE**

**at the Du Pont
Exhibit—
World's Fair,
New York**

Glistening and transparent, Transwrap Packages are one of the best assets your product could have at the point of sale. Yet Transwrap Packages are remarkably economical. Employing either printed or unprinted Cellophane, run directly from the roll, they are automatically filled, formed and sealed at speeds of sixty or more units per minute.

An ideal sample package, as well as a regular production package, Transwrap Packages are available for a wide range of assorted products.

Send us samples of your product and we will return them in Transwrap Packages with full information about how the Transwrap Machine may be fitted to your requirements.



Illustrating the wide range of the Transwrap Machines. From the smallest to the largest, Transwrap Packages are uniformly strong and attractive.

STOKES & SMITH CO

PACKAGING MACHINERY

PAPER BOX MACHINERY

FRANKFORD, PHILADELPHIA, U. S. A.

Plants and Personalities

IN THE BELIEF that business should use every opportunity to improve its relations with the general public, the Package Machinery Co., Springfield, Mass., has instituted what is believed to be the first attempt



of an industrial organization to stimulate direct interest of its employees in "good manners, pleasant voice and friendly concern" toward those who telephone the company. Illustrated is the company's telephone receptionist giving a group of secretaries and stenographers points in telephone technique.

THE AMERICAN MANAGEMENT ASSN., New York, N. Y., has announced that the 11th Packaging Exposition and Conference will be held in Chicago in the spring of 1941. Dates of the exposition and conference have been set tentatively for March 25 to 28, inclusive. The hotel has not yet been determined.

HYGIENIC TUBE & CONTAINER CORP., Newark, N. J., announces the change of its name to Celluplastic Corp. The personnel and management will continue as heretofore.

CELLULOID CORP. has announced the removal of their New York headquarters to 180 Madison Avenue.

CLARENCE H. RHOADES, president of The Rhoades Paper Box Co., Springfield, Ohio, died April 16.

PLANS FOR A complete fabricating plant of folding cartons and corrugated shipping containers at Ft. Worth, Texas, are announced by the Container Corp. of America. J. R. Neil, formerly eastern sales manager, will head up both sales and operations in the new division.

UNION PASTE CO. is now located at 1605 Hyde Park Avenue, Hyde Park, Mass.

CHASPEC MANUFACTURING CO., New York, N. Y., announces that David S. Greenfield is now in charge of a new division devoted to fancy box finishes.

THE AMERICAN BOX BOARD CO., Chicago, Ill., has moved its plant and offices to 407 East 25th Street.

GEORGE C. MILLER has been appointed sales manager of the Plastics Division of the Carbide and Carbon Chemicals Corp., New York, N. Y.

SEWELL P. MOORE has joined the New York sales staff of the Ketterlinus Lithographic Manufacturing Co.

JACOB T. SCHULIST, former vice president and director of the National Adhesives Corp., New York, N. Y., and head of its New England division at Boston until his retirement three years ago, died of a heart attack April 26 at the age of 69.

THE PLASTICS DIVISION of the Monsanto Chemical Co. recently opened its new research laboratory at Springfield, Mass.

H. DENBIGH ELLIS has been elected president of the Wilson & Bennett Manufacturing Co., Chicago, Ill., succeeding Wilfred Sykes, who was chairman and president of the company. Mr. Sykes remains chairman of the board.

G. E. HUNT has been appointed to take charge of the Indianapolis office of Cutler-Hammer, Inc., with offices at 307 N. Pennsylvania Ave. This office is under the supervision of C. J. Maloney, manager of the Chicago district sales territory.



THE 1939 All-America Package Competition exhibit was dramatically displayed in the window of the Lake Shore Trust & Savings Bank in Chicago, Ill. As may be seen in the illustration, the prize-winning packages were presented in conjunction with the March issue of *Modern Packaging*.

THESE LIQUORS TO WET AMERICA'S WHISTLE

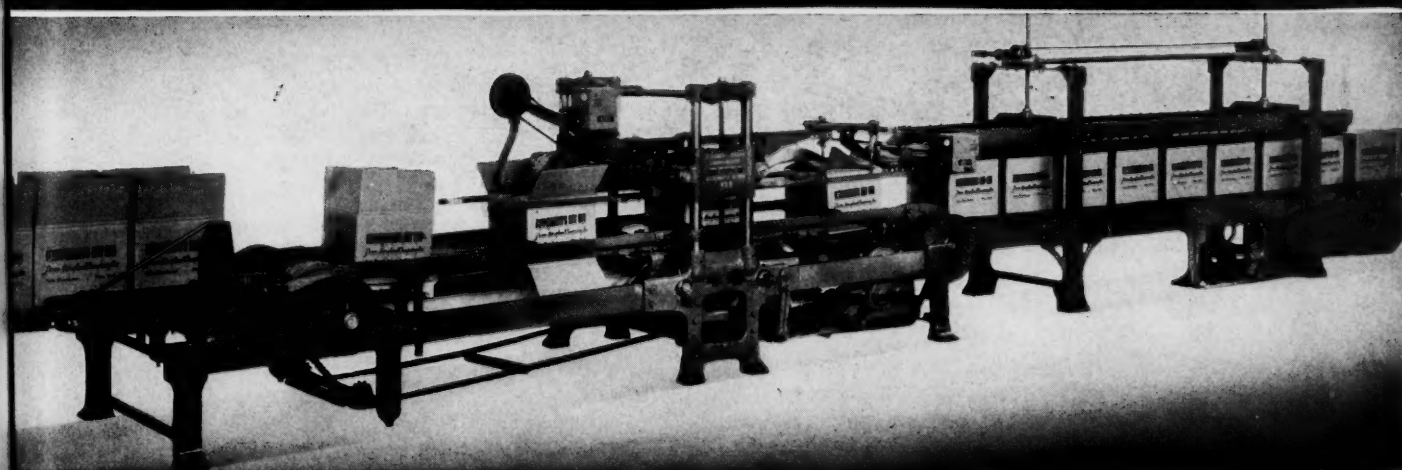
Are Case-Sealed by
STANDARD-KNAPP
Equipment

Famous thirst-quenchers like
Gordon's Gin, Four Roses Whiskey,
Heublein's Club Cocktails and a host of
other bottled spirits are case-sealed by
Standard-Knapp equipment.

Standard-Knapp case-sealers will be found on
most famous packaging lines in a hundred indus-
tries: foods, confections, drugs, cosmetics, etc. The rea-
sons? Low unit cost, high cooperating efficiency.

It will pay you to investigate the economy possibili-
ties of Standard-Knapp equipment on your packaging
line.

Consult our nearest office for
further information.



STANDARD-KNAPP CORPORATION

MANUFACTURERS OF CASE SEALING, CASE PACKAGING, AND CAN LABELING MACHINES

43-27 32nd Place • LONG ISLAND CITY, N. Y.

Paul Brown Building
ST. LOUIS, MISSOURI

208 W. Washington Street
CHICAGO

702 Society for Sav. Bldg.
CLEVELAND

300 Seventh Street
SAN FRANCISCO

420 S. San Pedro Street
LOS ANGELES

3224 Western Avenue
SEATTLE

1208 S. W. Yamhill Street
PORTLAND, OREGON

Windsor House, Victoria Street
LONDON, ENGLAND

For Your Information File

* Unless otherwise indicated, copies of catalogs, booklets, etc., mentioned in this department may be obtained without charge by writing to the sponsoring company at the address given.

"ART DIRECTORS 18TH ANNUAL ADVERTISING Art" (Published by Longmans Green & Co., New York, N. Y., \$5.00). For the eighteenth consecutive year, the "Annual of Advertising Art" offers in a single volume a pictorial record of the foremost specimens of American commercial art. The "Annual" is a national record which shows all the pictures and designs displayed in the annual exhibit of the Art Directors Club in New York, Chicago and Philadelphia, including those touring the nation under the auspices of the American Federation of Arts.

Textual articles by authorities describe our progress in advertising art and clarify the goals of art director and artist. Indices of artists, advertisers and advertising agencies make the "Annual" a ready and convenient reference book.

"SIXTH ANNUAL ADVERTISING AND Publishing Production Yearbook," edited by Leo H. Joachim (Published by Colton Press, Inc., New York, N. Y.). The use for the first time of a newspaper mat combined with a cellulose acetate to produce a three-dimensional sculptured cover design is one of the new features of this sixth "Production Yearbook." Another innovation, in the form of 56 different art and reproduction techniques of the same pictorial subject, is included in the new volume which comprises some 440 pages embracing the subjects of art and photography, engraving and electrotyping, bookmaking and binding, paper and ink, printing processes, production data and typography. The volume contains contributions of over 200 leading authorities in the graphic arts.

One of the outstanding features of the new edition is its typographic streamlining. Thus, by an ingenious system of heads, sub-captions, boldface type and indenting, data has been so arranged that answers to specific problems may be found instantly. Tables and

charts have been completely modernized in a typographic arrangement that the publishers believe is entirely original. Sectional handling of the various features, started in previous issues, has been continued.

A completely new feature has been devoted to a discussion of 175 new and important developments in the graphic arts, arranged alphabetically, and the "robot chart" idea started in a previous edition has been expanded notably. Color photography and color printing have been used in more profusion than heretofore and, taking a leaf from the pocket digest magazines, editorial material has been reduced from the standpoint of reading time and capsulized into the smallest possible space for ready reference.

INTERNATIONAL PRINTING INK DIVISION of the Interchemical Corp., New York, N. Y., has issued a new "Color Guide" which is intended to serve as a practical reference chart for use in selecting colors and appropriate color combinations. The Guide represents many months of intensive investigation to determine the most frequently used colors. The consensus of the opinions expressed by printers and advertisers was used as a basis for the selection of the 108 colors which comprise the Guide.

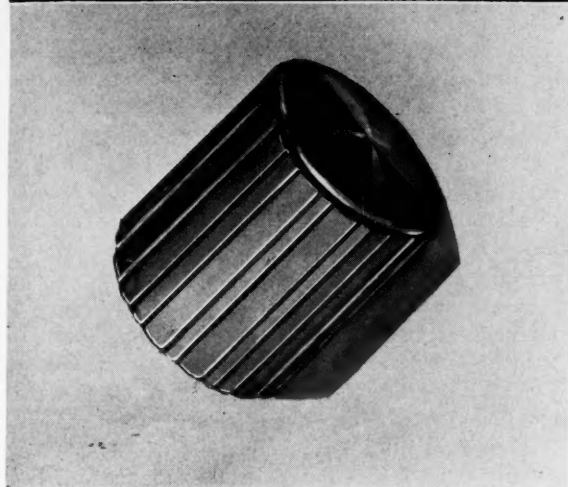
Suggestions of printers, obtained through a nationwide questionnaire survey, were incorporated also in devising the format of the new IPI Guide. It is in the form of a 10 in. by 12 in. book with a cellulose cover and white plastic binding. Index tabs covered with transparent acetate are provided for quick color reference. Each of the 108 color swatches shows a solid area, a 50 per cent screen tint and a 10 per cent tint (using a 120 screen). Consequently, because of the steppings, there are actually 324 colors from which to choose if the Guide is used merely as a selector. These halftone steppings show exactly how the ink will print on screen work under average commercial conditions.

The Guide also contains two pages depicting four popular halftone blacks. Seven pages are devoted to showing four-color process progressive proofs. Two pages of information explain the three-dimensional color designations by which each swatch is identified in the Guide. Readily understood charts are provided to explain the manner by which these notations were reached. By utilizing these charts, a simple method of determining suitable color relationships is possible.

KAY DISPLAYS, INC., New York, N. Y., has issued a booklet titled "Displays Featured by National Advertisers in 1940." The booklet illustrates and comments upon some 22 displays.

THE GLASS CENTER at the New York World's Fair, sponsored by the Owens-Illinois Glass Co., the Pittsburgh Plate Glass Co., Corning Glass Works and the Owens-Corning Fiberglas Corp., has been enlarged and several structural changes made. New exhibits, new products and many other features have been added to the displays of last year.

CAPEM B-4-F sorts *plastic* caps *Automatically*



Dress up your package with a plastic cap! For Capem sorts and applies plastic caps as fast and accurately as ordinary cappers handle metal. Deep caps, shallow caps, odd sizes and shapes are all the same to the new Capem B-4-F.

And you get perfect registration, too. For there are no chuck spindle extensions required on this new capper. You change over from one size container to another almost instantly by raising or lowering the capping head through an elevating screw.

The Capem B-4-F is also equipped with a helicoid worm feed intake which eliminates much of the difficulty usually experienced in handling liquid-filled containers at high speeds. Guaranteed for speeds up to 125 per minute, it is actually capable of considerably higher speeds.

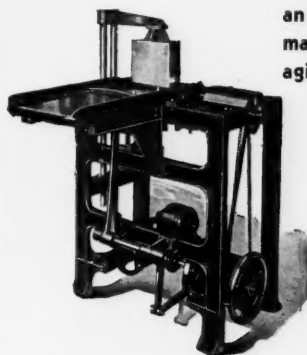
There are other important new features, too. Capem B-4-F has already speeded up the production lines of many well-known users. It will do the same for you. Write for full information on this latest Consolidated contribution to efficient packaging.

**CONSOLIDATED
PACKAGING MACHINERY CORP.**
1400 WEST AVENUE BUFFALO, N. Y.

"Yours... for PROFITABLE OPERATION"

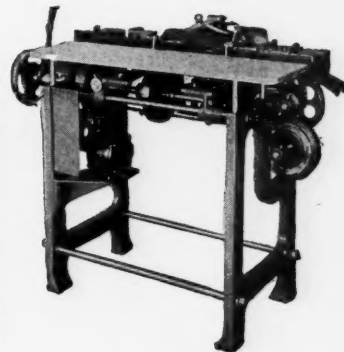
...IN YOUR
CARTON PACKAGING DEPARTMENT

PACKAGING
in your plant is placed upon
an efficient basis when you
make use of the PETERS pack-
aging machines available.



This PETERS JUNIOR
CARTON FORMING
AND LINING MA-
CHINE sets up cartons
at speeds up to 40 per
minute, requiring only
one operator. A sheet
liner is interfolded in
the carton at the same

time the carton is being set up, thereby making a most in-
expensive packaging operation. After the cartons are set
up they are carried by conveyor belt to the packing table
or filling unit. Machine can be made adjustable to handle
a wide range of carton sizes.



After being filled,
the cartons enter this
PETERS JUNIOR
CARTON FOLD-
ING AND CLOS-
ING MACHINE on
conveyor belt where
they are automati-
cally closed at speeds
up to 40 per minute.
This machine can also
be made adjustable to close a wide range of carton sizes.

Send us samples of the cartons you are interested in han-
dling on equipment and ask us to recommend machines to
meet your specific requirements. No obligation.

PETERS MACHINERY COMPANY
GENERAL OFFICE AND FACTORY
4700 RAVENSWOOD AVENUE, CHICAGO, ILL.



1



2



3

WRAPPING ROLLED PAPER AUTOMATICALLY

(Continued from page 42)

serve the bulk of the package required careful application of the wrap and the human hand was long thought to be the only possible means of placing this wrap.

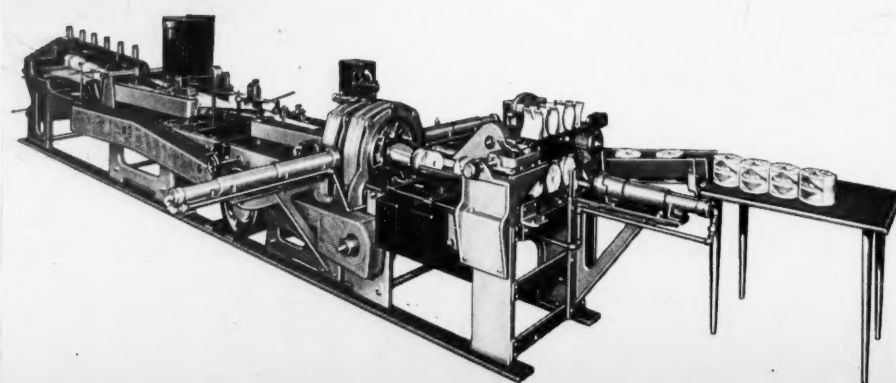
Paper mills operate their paper machines 24 hours per day. The conversion of the paper coming from these machines has, in the past, been effected with one working shift, due to the fact that female labor was required for packaging. Night shifts were not as a rule employed for conversion, because of the regulations surrounding the employment of this type of labor.

This made it necessary for the mills to install sufficient equipment to convert in eight hours the product of a 24-machine run. It can be appreciated that this meant an unusual capital investment, a large operating machine area and ample raw material storage. Some attempts had been made in the past to fit wrapping machines to this production schedule, but speed factors and other factors, previously mentioned, indicated that standard wrapping equipment, used for wrapping other products, would require radical redesign before it could be adapted to handling a toilet paper roll.

This, in brief, was the problem or group of problems confronting the Hoberg Paper Mills, manufacturers of absorbent papers, with mills at Green Bay, Wis. The solution was found in the adoption of a new type of wrapping machine with a unit speed of from 70 to 100 rolls of standard toilet paper per minute. Each machine applies a printed wrap, the ends of which are twisted and tucked into the ends of the core in the roll.

1. Hand wrapping as performed prior to automatic equipment. 2. The same spot in the plant with hand wrapping eliminated. Machines now feed into conveyors which carry output to automatic wrappers. Hand wrapping tables retained for short run orders. 3. Section of conveyor system leading from the winders to the wrapping machines. 4. One of the four wrapping units as installed. The machine utilizes photo-electric eye for register and operates from rolls printed more economically than was previously possible when sheeted stock was utilized.

4



In operation, the machine takes a roll of printed wrapper about 30 in. in diameter, sufficiently wide to cover the circumference of the roll and to allow for a gluing seam. The roll has photoelectric eye marks at points along the gluing edge. The roll is unwound, with the web entering the machine just below a conveyor which carries the toilet rolls. The rolls are mechanically spaced, but should imperfect coordination with the wrapper occur at any point in their movement, the speed of the conveyor is changed sufficiently to meet and correct this condition through the action of the photoelectric cell.

The wrapper is drawn into a "U" shaped former and the rolls are deposited in proper position on the moving web. A glue seam is placed on one edge of the wrap which is turned in and the other edge folded over it. The rolls are thus tightly wrapped in a continuous tube with sufficient space between them for the end wrap. As the tube moves forward, the first roll enters a twisting head. This device moves the roll forward and, at the same time, twists it so that a twisted portion of the wrap, about an inch long and the diameter of a lead pencil, is placed between each roll.

This twisted section is carried under a second photoelectric cell, actuating a pair of knives which move from either side, cutting the twisted web at the half-way mark on the twisted section. The separated roll is carried along with a portion of the twisted section at either end, until its movement actuates a solenoid.

The roll is moved into a conveyor, operating at right angles to its former travel, and the twisted ends are thrust tightly into the core ends by means of solenoid actuated pistons.

Completed rolls are delivered end up on a packing table where a single packer places them in shipping containers and moves the filled cartons to a conveyor. The whole operation is rotary in action and the product moves continuously through the wrapping machine without a stop. Any variation in the diameter of the roll is automatically cared for in that the wrapper is drawn or tubed to fit its contents.

Three operators are required, with each machine taking the output of four toilet paper machines. The machines are operated 24 hours per day and have sufficient speed so that any change in adjustment may be made with plenty of time to care for production.

To accommodate the new installations, plant layout was substantially changed. Formerly, some 28 toilet paper winders were utilized, each producing 10,000 rolls every eight hours. Each machine represented a complete production unit in that one machine operator and three wrapping operators completed the roll, wrapped it and placed it in shipping cases at each machine station. Production demands resulted in a crowding of the converting room so that machines had to be located at right angles to the main production lines, thus interfering with the movement of raw materials and of the finished product.

★ **ANNOUNCEMENT** ★

HYGIENIC TUBE & CONTAINER CORPORATION

announces the change of its name to

CELLUPLASTIC CORPORATION

The products, policies and personnel will remain unchanged

The only change is in the name

VIALS ★ CONTAINERS ★ SPECIALTIES

Lightweight, seamless, unbreakable, all colors

CELLUPLASTIC CORPORATION



Executive Offices and Factory

46 Ave. L—Newark, N. J. Market 2-4544

New York Display office: 626—5th Ave., New York

With the introduction of automatic wrapping, the converting floor has been completely redesigned. Converting machines were set in four straight production lines, with fewer machines being required to obtain a far greater production. Open runways obtained in the new layout now facilitate movement of raw materials. This has been made possible by the use of three automatic wrapping machines, with a fourth now under construction and shortly to be introduced.

In every instance, the old hand wrapping tables have been retained, but conveyors now run along the table edges. Thus when it becomes necessary to fill special orders, too small to justify the use of the wrapping machines, it is possible to do this work by hand methods at any one of the roll winding units, without disturbing the conveyance of the product of all of the other machines in the line to the automatic wrapping machine. The conveyors are so designed that they may be covered at any point where it is desired to introduce hand wrapping operations.

Wrappers are now printed on a rotary press instead of a flat bed press and require no sheeting. The savings provided by the machine are not only reflected in the labor reduction, but in the lower wrapping cost. Moreover continuous operation of the converting machines over a 24-hour production day has reduced the number of machines required for conversion and thus has substantially lowered the necessary capital investment in such machines.

Credit: Installation designed by Hudson Sharp Machine Co. who also manufactured the wrapping machines. Conveyors by The Lamson Co., Inc.

KEEPING CONVEYORS FLEXIBLE

(Continued from page 38)

plants—as well as those now being installed in a third plant in Washington, D. C.—are designed to operate at a speed of 12 f.p.m. per minute when carrying individual cartons of milk to the storage container loading platform. This slow speed is necessitated both by the output rate of the filling machines and by the speed of handling when individual containers are to be placed into storage containers. A far greater speed—60 f.p.m. per minute—is possible when, instead of individual containers, the storage containers are to be handled. Thus both in high speed and in reverse, the belt conveyors operate at this latter rate.

In contrast to former handling methods, the new installations are reported to have achieved marked economies estimated as in excess of 50 per cent of previous material handling costs.

Credit: Chain and belt conveyor systems designed and installed by The Lamson Co., Inc. Paper container forming, filling and sealing machines by the Ex-Cell-O Corp.

PLASTICS FOR DISPLAYS

(Continued from page 73)

geared motor will go into action again and repeat our demonstration.

A supporting rod in the rear, made in two sections for adjustments through a thumb screw to permit regulating of the height for proper tension, will support the tie and a metal identifying name plate. This plate could be fastened by two screws and easily arranged for removal, if desired, for various tie names such as colorful ties representing college colors, military organizations, etc.

A very pleasing and effective collar display that would always be clean can be made of a luminous plastic material, preferably in pastel or shirt colors for contrast, and this mounted on a phenolic plastic base. It would be a stopper.

Plastics for displays are practical, lasting and, where properly handled in design, too good-looking not to use or to fail as salesmen.



The Auburn Rubber Corp., Auburn, Ind., was awarded the grand trophy prize in the recent National Toy Packaging Competition for the package which most effectively merchandises its products and which incorporates merchandising appeal. Container design is so executed as to provide ample display and recognition value on the dealers' shelves, side panels bearing illustrations of the toys contained within each package. The front end panel likewise bears an illustration in addition to the company name. The base of the box has a drop front panel so that this portion of the package can be utilized as a part of the toy sets. The family of packages designed by Martin Ullman.



ANILINE PRINTING PRESSES

A specially designed unit for each and every purpose to which this new and popular process has been applied. One to four colors. Any widths. Units may be used with aniline inks, water soluble inks or soft oil inks.

Specially designed sheeteer for use with our presses with speed up to 300 lineal feet of sheeted stock per minute.

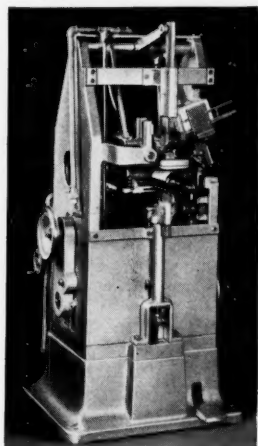
HUDSON-SHARP
MACHINE CO. • GREEN BAY • WIS

ANY SIZE SHAPE LABEL

From $\frac{3}{4}$ of an inch to $6\frac{1}{2}$ by $6\frac{1}{2}$ inches
Applied Neatly and Precisely by the

MODEL CH WORLD

Semi-Automatic Labeler



The Model CH WORLD Semi-Automatic Labeler. Write for the new, illustrated bulletin CH-7 for complete information on this new World Labeler.

The Model CH or its sturdy big brother the Model CHx applies this wide range of labels to containers of every size and shape from ampoules to 4" in diameter. Sturdy, compact, easy to make quick, positive change-overs, the Model CH is a model of versatility, operating convenience and accessibility. It's the World's best bet for those who require high grade, low cost application of labels to a variety of packages.

ECONOMIC MACHINERY CO.
WORCESTER - - - MASSACHUSETTS

Shoot your sales

Sky HIGH

with the PROVED POPULARITY
of FEDERAL SPRAYERS!



Federal Sprayers have played no small part in promoting sales of many nationally advertised liquid products such as:

- • Tavern Cleaner—
- • Aeromist—
- • Spray-X—
- • Avalon—
- • Kleerpane
- • Dart
- • Zip
- • Glass Clean
- • Glass Foil
- • Dwindo
- • Whiz
- • Window Lite

Consumers prefer Federal Sprayer packaged products because they apply liquids so easily, because they end mess and drip, because they save money by putting an end to waste.

Their low cost makes them ideal for either packages or premiums.

FEDERAL TOOL CORPORATION

"Closures With A Function"

400 North Leavitt Street, Chicago, Ill.

MACHINE PACKAGING FOR THE NOODLE INDUSTRY

(Continued from page 41)

The closing operation is accomplished with an automatic heat-sealing machine which is operated by one girl. The recent development to produce a heat-seal closure on PT cellophane has made this efficient method possible. If desired, saddles or recipe pamphlets may be attached to the top of the bag in this operation. The top-closing machine should be equipped with a foot pedal, so that the girl has both hands free to place the bag in position for sealing, thereby speeding up production time.

The finished bags then pass down the conveyor a short distance to a small collecting table where a girl packs them in shipping containers.

The speed of operation of this production unit as outlined varies from 24 to 30 packages per minute depending upon the size of the package, the product and the experience of the operators. Machine speed for the manufacture of bags guaranteed at 30 bags per minute.

Free flowing items, known as "short goods," are also packaged on the new equipment. This particular product can be weighed automatically on a net weight scale and it is possible to capitalize on this feature. If the package size is suitable and the runs sufficiently large, an automatic scale can be designed to work in conjunction with the container machine so that it will automatically fill the mandrels before they enter the machine. This has not been done as yet because production quantities have not warranted the expense of time and money necessary to design and build special attachments required to control an automatic scale in this manner.

On smaller runs, a more efficient method of using the container machine for short goods is to have a set of tubular mandrels made up for the correct bag size. These mandrels will run through the container machine only as a form on which to make a bag. The operator at the delivery end of the machine strips the bag from the form and places the empty bag on the conveyor belt, at the same time placing the extracted mandrel on the return conveyor.

The automatic scale is mounted above the conveyor belt and is operated by one girl. The filled bag is replaced on the conveyor belt and the folding, sealing and casing operations continue the same as for noodles.

In addition to the adoption of machine methods of packaging noodles and short goods, the Viviano Co. is utilizing a production line for packaging macaroni sticks in double-edge printed cellophane. This double-edged cellophane has either a continuous printed design on the ends, using a label for identification, or a spot printed design.

The equipment here used consists of the following: One sheeting and gluing machine. This machine takes

cellophane from a roll, feeds out the required length, applies the glue-line across the web with a spot in the center, if necessary, for the label and delivers the glued and cut sheet ready for wrapping; two pairs of scales and two specially designed troughs in which the cellophane package is formed. These troughs are mounted directly on the weighing platter of the scales. One work table is specially designed for convenient location of two scales and provides work space for the closing of the ends of the package with Scotch tape. Two Scotch tape dispensers, two benches to hold containers filled with macaroni sticks and two benches to hold containers for casing operation are also used.

Credit: Container forming and filling machine developed by Shellmar Products Co. Printed cellophane for all packages supplied by Shellmar Products Co. Scales by The Exact Weight Scale Co.

THE CASE FOR PACKAGING MACHINERY

(Continued from page 32)

were not available. Sewing machines are so common that we don't think of them as machines any more than we think of typewriters as pieces of machinery.

Think, too, where we would be without cheap electric light and power. The old spruce-gum days were the days of the kerosene and whale-oil lamps. Think of the vast employment there is now, in the whole electrical goods industry as well as in the public utilities, themselves—all because we have those wicked machines, the electric generators.

Any argument like this, when carried to its ultimate conclusion, becomes obviously absurd. The packaging industry is not an unusual industry. It is one that has grown by leaps and bounds in the last quarter of a century, and so have numerous others. It is these industries that have grown in the last quarter of a century that now give us the bulk of our employment. They are the ones that are absorbing those who get out of work in the shrinking industries, or are displaced in the stable industries that become more efficient. It is these rapidly growing industries that we must look to for the future. We all know that more employment, more jobs, more production and more consumption are essential for our continued happiness. That goes without saying, but would the packaging industry, or any of these other new ones, be growing as they are, without the use of machines? I have already tried to give the answer, with concrete and specific examples. It is true, in all these industries, that, if machines were not available, the industries themselves would hardly have been started.

The packaging machinery industry, as distinct from the packaging industry, has had one other feature of which it could be proud. It has on the whole had a very stable labor record. While business does go up

and down, as in all capital goods industries, the industry has maintained extremely stable employment. It has a labor turn-over record that any one can be proud of. The packaging machinery industry has done, and is doing, its part to keep employment stable.

There are other angles to this question of automatic machinery invention and more jobs that ought to have a very frank and full discussion. If business is oppressed by unfavorable public opinion, it is frequently business's own fault. Business has learned how to sell its own products. It must use that same sales effort to explain itself to the public. The public must be taught business's needs, and must be taught the fundamental philosophies that affect it. No one but business men can do this selling. It has become one of their major responsibilities.

Talk about automatic machinery has been mixed in with the talk about patents. Every good thing can be abused. There can be patent pools, tending toward monopoly, which may be bad, but that does not mean that the whole idea of protecting inventors' rights should be done away with. We have had a fine patent system in this country. It was one of the first things that was started when the new United States was born. Perhaps, as a result of the protection of his invention, Yankee ingenuity has become a universal word throughout the world. The Yankee was encouraged to use ingenuity; he was protected in his inventions. He did use it, and new industries have sprung up all over the land. Because some people have abused the privilege, it should not be denied to all. We might just as well say that because some one individual eats or drinks to excess, then no one should be allowed to either eat or drink at all.

Certainly in the package machinery industry, there has been no evidence of any patent restriction putting a damper on progress. Each of us has certain methods of doing things that are protected, but there is no sign that the industry has been stifled; there is certainly no sign that invention has been kept from the public. During the ten years of the depression, there have been phenomenal advances in packaging machinery in all lines; great increases in flexibility; increases in speed; lowering of prices; and general improvement of design. The fact that we are each secure in our own patents has helped each one of us in the machinery industry to put our best foot forward. No one has had any monopoly that acted as a brake on progress. Perhaps there are cases where patent pools should be curbed; perhaps the making of patents open to competitors, under certain conditions, should be encouraged. Certainly the National Automobile Chamber of Commerce, where the various automobile manufacturers cross-license one another, has been a boon to that industry, and has been a boon to the public. There the whole industry has shared its patents under a working agreement where each inventor company got a share in its own invention, but that pool has worked to the public's advantage, because, in this manner, all cars could have the new improvements.

LUSTEROID



Ideal for Sampling:

LUSTEROID rigid-cellulose tubes and vials have proven ideal sample packages for drugs, cosmetics, small objects and petroleum products. The wide range of diameters and lengths (every LUSTEROID package is custom-made) and the innumerable color possibilities make LUSTEROID an excellent sale package as well.

LUSTEROID comes either transparent, translucent or opaque in any color you wish. Multi-color labelling is an integral part of the manufacture of these sales-building vials. LUSTEROID'S light weight, strength and unbreakable quality provide real economies in packaging and shipping.

A note or phone call will bring an answer to your packaging problem.

LUSTEROID CONTAINER CO., INC.

Formerly Lusteroid Division of Sillocks-Miller Company
SOUTH ORANGE NEW JERSEY

Such patent pools cannot work in all industries, but they are an example of how well our patent laws do work for the good of the public. Because some people have abused patent rights is no reason to change the present set-up that has worked so well for a century and a half. Because some miser occasionally puts all his money in his mattress or his sock and does not spend any is not a reason for abolishing money, although it might be a reason for taxing the miser.

The hearts of every one of us go out to those people who have no jobs and who really are looking for them. There isn't one of us who doesn't want to help them in every way we can. Yet sometimes that appeal to our hearts carries us out of ourselves and makes us blind to facts. We hear of some labor-saving machine and a demagogue tells us that it has thrown us out of work. When that happens, we just don't look at the facts. If we took a moment to think, there is not a single one of us, including those who are out of work, who would wish to do away with machines. Certainly there is no one who would suggest that automobiles be abolished, for instance. The greatest insult we can give today to any plan is to say, "This sounds like the horse and buggy day," but perhaps even the buggy was a machine.

I hope, therefore, that all of us who are engaged in business will see to it that some of our real selling effort is spent in helping the public understand how business works and, particularly, how machines do make the most jobs for the most people and thereby make for us all, the most possible customers.

THE CASE FOR PACKAGING MACHINERY AS OTHERS VIEW IT

(Continued from page 33)

us to give our customers better products at more reasonable prices.

"We employ quite a little hand labor due to the nature of our products. If we had not acquired this new equipment, it is questionable whether our hand labor would now be employed by us as a company. We believe machinery made it all possible.

"Probably if we had more equipment, we could turn out other products necessitating our employing more help and giving more work to the suppliers from raw materials. Labor and machinery go forward together."

C. BENJ. BRUSH,
The Trade Laboratories, Inc.

"Our country is such a striking demonstration of the value of labor-saving machinery that one wonders how its benefits can be seriously questioned.

"Without it, the high wages we pay would be impossible—you do not find labor-saving machinery in countries that are visited by famines. Those who argue

against labor-saving machinery never consider the great increase in industry that comes from cheaper production, which, in turn, increases employment all down the line. More paper, more printing and more materials of all sorts are needed. Think for a moment what automobiles, which would be impossible without labor-saving machines and equipment, have done for industry in this country.

"In our greatest period of the introduction of labor-saving machinery—from 1899 to 1929—the national income increased 432 per cent; in purchasing power there was a rise of 140 per cent; wage rates increased 47 per cent in purchasing power; the population increased 62 per cent while the number of workers 69 per cent. With the increase in income and purchasing power, the hours of work decreased 15 per cent.

"The contention that automatic machinery reduces the amount of employment is refuted by all figures. For instance, in June, 1935, the volume of production was 71 per cent of the 1929 average while employment was 76 per cent.

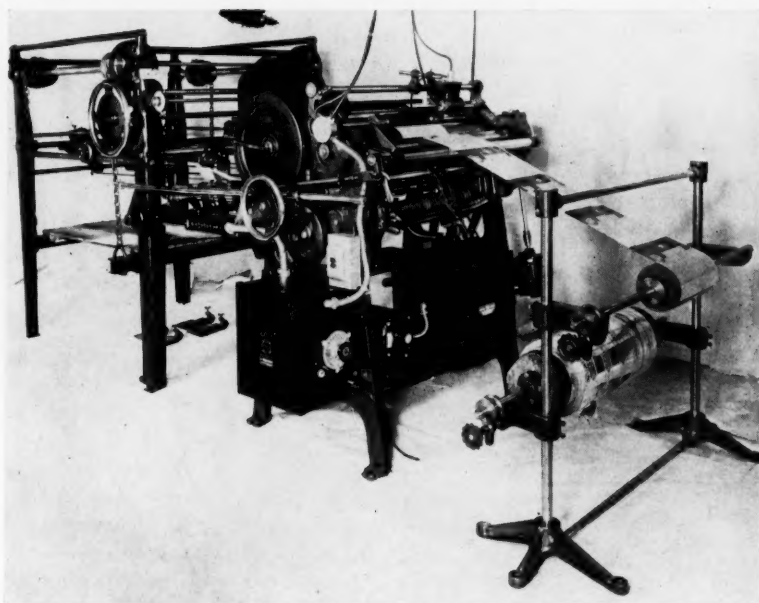
"As a manufacturer of labor-saving machinery for forty years, I have yet to know of an instance where conditions have not been helped by the introduction of such machinery, although at times there has been a little temporary dislocation of a few operators. Those who attack labor-saving machinery are not working for the best interest of any class of our citizens and they cannot show any sound figures to justify their position."

J. STOGDELL STOKES,
President
Stokes & Smith Co.

"When we think of the billions of boxes of soap powder, soap flakes, soap chips and such products which are consumed annually by American housewives, it strikes us immediately that here is an excellent example of a low cost utility product made possible entirely by automatic machinery. Without the machines, our homemakers would still be processing crude bars of soap in their own kitchens. But with ingenious machinery for manufacturing soap granules, powders, chips and flakes, as well as high-speed machinery for accurately measuring these products into machine-made boxes, a tremendous industry has been built up in America which employs hundreds of thousands of workers directly and indirectly.

"Then, too, consider for a moment the American institution of packaged breakfast cereal. If it weren't for automatic machinery, I doubt if you could buy anywhere, at any price, the convenient carton of ready-to-eat corn flakes. In the first place, the flakes must be made by machine. It is impossible to produce them with any sort of a hand process. Then think how prohibitive the cost of the boxes would be if they had to be turned out by hand instead of on high-speed printing presses. This is also true of the pure inner lining paper and, of course, the final operation of actually packaging the flakes is another reason why the cost per box is within the reach of everyone. With billions of boxes

PURCHASED FOR ACCURACY AND OPERATED WITH CONFIDENCE



BECK Automatic SHEETERS
with **ELECTRIC-EYE** Controlled
DIFFERENTIAL & Automatic
Lowering Table SHEET PILER

are today meeting the most exacting requirements in cutting to printed register on bases of high production outputs.

Designed for your particular requirements, these fully ball and roller bearing machines are now almost universally the choice of those calling for the most accurate and profitable cutting-to-printed-register, of nearly every class of material in the Packaging and Graphic industries.

Send for prices and information

CHARLES BECK MACHINE COMPANY

13th & Callowhill Streets

Philadelphia, Pa.

**LACQUER
VARNISH and GUM
and WAX COATING for**

**Labels
Wraps
Posters
Displays**

and other printed matter

Boxmakers, printers, as well as package users come to Lowery and Schwartz for a superior paper coating service. Lowery and Schwartz have the efficient, specialized machinery, the long experience, and the skill that assures high quality, prompt delivery and low cost.

LOWERY and SCHWARTZ
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CAAnal 6-7703



Patent Pending

**Want a Real
DEAL
PROMOTER?**

**This
Weinman
TRANSPARENT**

COUNTER DISPLAY...

Does Double Duty—as a container for a Special Deal on Your Product and as a sales-compelling Counter Display unit for the retailer! National advertisers everywhere are capitalizing on the Transparent Way to increase retail sales.

**WEINMAN TRANSPARENT
PACKAGES**

are made in an endless variety of shapes, sizes, and styles—with transparent or metal covers and bottoms—plain or printed in one or more colors.

WIN THE SALES SPOT!

Weinman Transparent Acetate Containers get **FIRST PLACE** on the Dealers' Counters!

WRITE TODAY for **FREE ILLUSTRATED CATALOG** and Price List. Or send your product to be packaged the transparent way. No obligation.

WEINMAN BROTHERS

TRANSPARENT BOX HEADQUARTERS

325 N. Wells St.

Dept. MP

Chicago, Ill.

(EXPERIENCED SALESMEN WRITE)

of cereal products being consumed, thousands of people are employed directly and indirectly in their production.

"One final example is the individual tea bag. Here is a convenient package which didn't even exist until someone invented an automatic machine to produce individual tea balls at a low cost which made possible mass distribution.

"The thousands of workers who have found employment in the manufacture of the gauze and filter paper, thread and string and tags and boxes used for producing tea balls did so as a direct result of the invention of tea bag making machinery."

KENDALL D. DOBLE,
Vice President & General Manager
Pneumatic Scale Corp., Ltd.

"The case for modern machinery is too often presented simply for its more spectacular contributions to easier living such as the automobile and the radio. Mr. Putnam digs deeper in his recognition that such vital factors, in our daily lives, as the telephone, our mail distribution system, clothing and even the small package of gum or candy on the counter of the corner store can only be enjoyed because of our highly developed machines.

"In recent years, the American people have been swayed by appeals to emotion which fail to take into consideration the advances toward easier living for the vast majority of people made solely through the development of machinery. Leisure, liberty and the pursuit of happiness have been enhanced by contributions of the machine to our way of living, to an incalculable extent. Even life itself has been lengthened for all of us by modern medical machinery such as the X-ray or machines for extracting and packaging vitamins. Surely no thinking American can fail to recognize the fundamental truth of the point of view so ably presented by Mr. Putnam."

J. C. DABNEY,
Sales Manager, Seybold Division
G. M. Basford Co.

"In my opinion, the stigma which is placed on machinery is largely due to the fact that those who criticize it do so from the standpoint of its productivity solely, not looking on the other side of the ledger to observe what its productivity accomplishes. They are too prone to take the attitude that the productivity of a machine is equivalent to 'so many hand workers' and, consequently, 'so many hand workers' are thrown out of a job.

"While it is true that machinery reallocates labor, it very definitely creates jobs and jobs which pay higher wages for less hours worked than prior to its conception.

"Possibly the best example of the mechanization of an industry is the automobile. Certainly the vast majority of us would not be owners of one or more cars today if the manufacture of them were still being affected under 1910 methods. The price would be beyond the means of the average person and the car per

capita census here in the United States would present a vastly different picture. Certainly the fact that we operate so many automobiles has created jobs not only in the automobile industry itself, but in all those which serve the industry, be it steel, upholstery, tires, electric light bulbs, mirrors, service stations, etc., etc.

"But let us look more particularly to the packaging field. If foods, cosmetics, toothpaste, etc., were still handled as they were only 25 years ago, could the chain stores carry those thousand-and-one items which go to make a happier life in this country of ours?

"Due to the packaging equipment which has been developed, the items enumerated above have been brought down to such a low cost that they are within the means of the vast majority of our population."

C. H. LAMBELET,
President
New Jersey Machine Corp.

"We have built and sold many hundreds of box making machines during the past 37 years and these machines have been instrumental in opening new packaging fields by reducing the price of the finished product so that it can be profitably used to package all kinds of merchandise, even penny packages of gum and candy.

"Instead of creating unemployment, the records will prove that our automatic machines have put many hundreds to work. True, without machines, thousands would be required to do the same amount of work manually, but, on the other hand, the cost of the finished product would be so great that the packager of medium priced commodities could not afford to use it and the demand would not exist."

ROGER C. DICKEY,
The International Paper Box Machine Co.

AUTOMATIC HANDLING OF LARGE BOTTLES

(Continued from page 50)

ing the day. Even though machinery is speedily adjustable, such frequent changes in package size are, of course, not encouraged, but the availability or possibility of making these changes contributes greatly to the ability of the plant managers to plan their production along the most economical lines and to minimize storage space requirements.

Credit: Bottle washer, Geo. J. Meyer Co. Filler, Horix Mfg. Co. Labeler, Economic Machinery Co. Capper, Resina Automatic Machinery Co., Inc. Case sealer, Standard-Knapp Corp. Bottles and shipping containers by the Olean Glass Works. Labels by the Consolidated Lithograph Corp. Closures by Ferdinand Gutmann & Co. Secondary closures supplied by the Celon Corp.

What's your GLUE RATIO?

Are you using too much adhesive? Hundreds of firms are . . . but don't know it. Upaco chemists know that the adhesive that will go the farthest—while providing a perfect seal . . . will usually give faster production and lowered spoilage. And, more, they know all the tricks of getting any special adhesive to "spread itself" for you. Twenty years of successful research have taught them that. Call upon them for aid and savings!

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DECATUR, ILLINOIS

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MODERN PACKAGING

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Formula of a SUCCESS PACKAGE



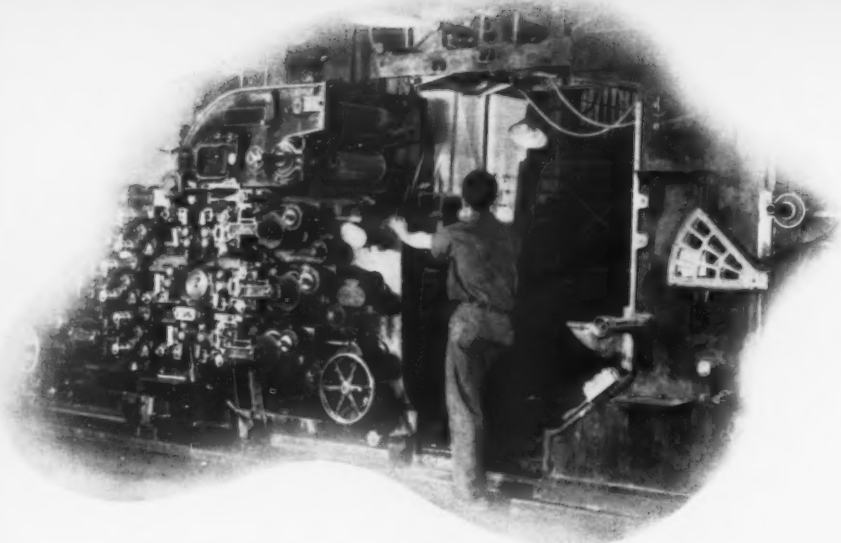
1 clever idea
+ sparkling MICHIGAN CARTON
add current design trend—SALES!

Capitalizing on the peasant influence now in vogue in house decoration Beach & Arthur Paper Co. introduced this clever napkin package early this spring. Flaunting a gay and colorful design this MICHIGAN CARTON acts as a perfect foil for the soft linen textured napkins. Since the package is a handy dispenser—set on the table or hung on the wall—it must be sturdy as well as beautiful. How well this MICHIGAN CARTON has served both as an eye-compelling salesman and protective package has been measured by sales. In the short time that this package has been on the market it has become an outstanding sales winner.

Have you a package that lags in competition? Why not give us a chance to study it carefully—perhaps we can suggest a new, more responsive approach to sales.



MICHIGAN CARTON CO. BATTLE CREEK, MICH.



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The MACHINE AGE of PACKAGING

No single factor has contributed more largely to the increased use of packaging than the advances in machine designing and construction which have made both the production and use of packages more economical, faster and more efficient.

SHELLMAR has always been keenly alive to the machine factor. Not only have its own production facilities been the subject of a constantly-moving program of betterment, but close touch has been maintained with

developments in the field of machines for applying package materials.

Technical Service and Engineering Staffs keep abreast of every new thought in packaging machinery, and are in position to recommend precisely the correct type of equipment for every packaging job where SHELLMAR materials are involved. This service, like all other phases of SHELLMAR service, is available for consultation at any time, without obligation. Simply address your inquiry to

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